

Intelligent Industrial Panel PC

PPC-F Series



IEI Remote Intelligent Management System

The PPC-F supports iEi iRIS remote management, which helps users to manage multiple devices through single management interface and elevates work efficiency. iRIS solution only requires a module and Internet connection!



iRIS solution



QNAP NAS

Complete IoT Solution!



■ Remote Power Management

Users can remotely power on/off all the iRIS devices and set up power cycle to simplify power control process.

ON

OFF

Unify industrial automation process through a simple setting!

■ 24-hour Active Recovery

Remote troubleshooting everywhere, there is no need to send out maintenance staff anymore!



Automatic Error Alert

System sends alert by email/SMS to designated members when error happens



Video Streaming and Record

Real-time record main screen video for trouble diagnosis



Remote Troubleshooting

Maintainers can troubleshoot the error through remote KVM

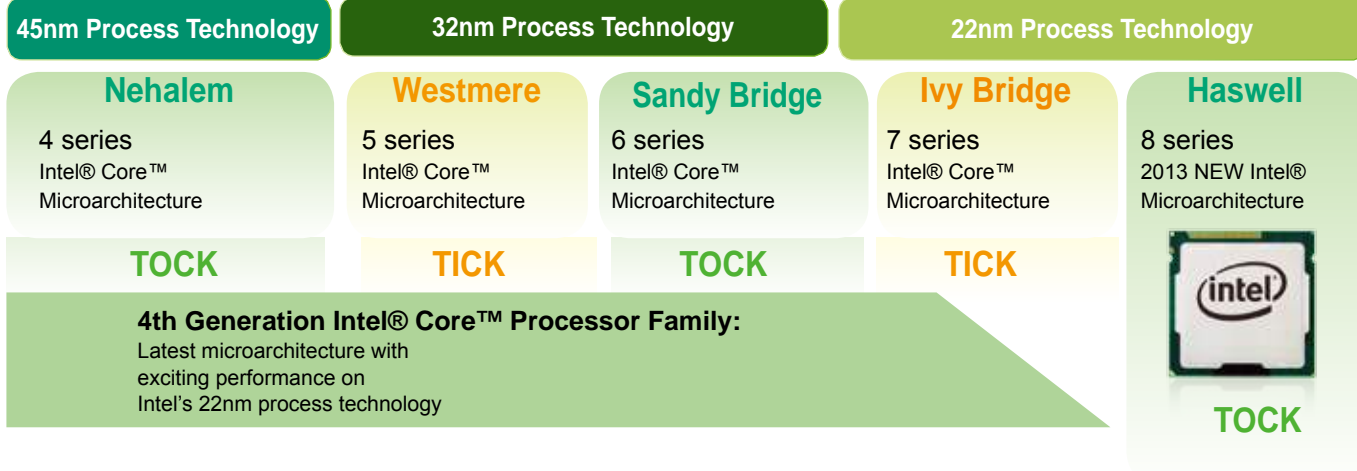
Save labor cost & improve efficiency!



Minimize downtime and improve service quality for kiosk and ticket machine applications!

Latest Intel® Cost Effective Mainstream H81 Platform

■ Platform Transition



■ Major Advantage of PPC-F H81 Platform

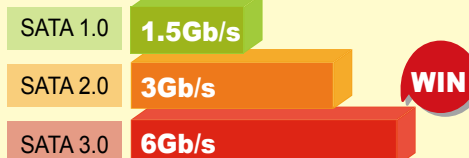
More Embedded CPU Choice

IEI selects more embedded CPUs in Haswell generation, including 35W/45W/54W/65W for the PPC-F H81 platform. It is more flexible to choose suitable CPU for different system requirements.



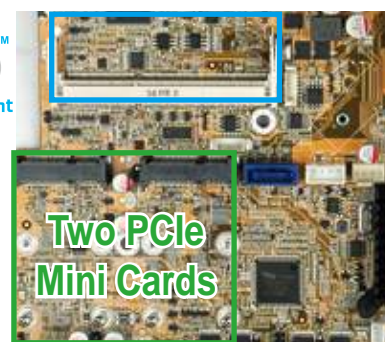
SATA 3.0 support

The PPC-F series equips with the latest SATA 3.0 interface that supports bandwidth up to 6Gb/s which is twice faster than SATA 2.0! Both 2.5" SATA HDD and SSD can be used in the SATA 3.0 interface.



■ PCIe Mini Card Expansion

Two full-size PCIe Mini card expansion slots are reserved in the PPC-F 2. With a wide variety of IEI PCIe Mini card solutions, it is flexible and easy to add extra functions on the system.



■ FHD Industrial Panel PC Available

Going big is the market trend on industrial panel PC and monitor products. Thus, IEI launches new PPC-F series industrial panel PC along with DM-F monitor series. Users can enjoy high quality graphics and enriched data display at the same time from FHD panels.



PPC-F Series 12"~24" PPC-F Selection Guide



| LCD Size | | 12” | 15” | 15” | 17” | 17” | 22” | 24” |
|------------------------|------------------------|--|--|--|--|--|--|--|
| Model | | PPC-F12B-BT | PPC-F15A-H81 | PPC-F15B-BT | PPC-F17A-H81 | PPC-F17B-BT | PPC-F22A-H81 | PPC-F24A-H81 |
| Display | LCD Size | 12” | 15” | 15” | 17” | 17” | 22” | 24” |
| | Max Resolution | 1024(W) x 768(H) | 1024(W) x 768(H) | 1024(W) x 768(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) | 1920(W) x 1080(H) | 1920(W) x 1080(H) |
| | Brightness (cd/m²) | 600 | 400 | 400 | 350 | 350 | 250 | 250 |
| | Contrast Ratio | 700 : 1 | 700 : 1 | 700 : 1 | 1000 : 1 | 1000 : 1 | 1000 : 1 | 3000 : 1 |
| | LCD Color | 16.2M | 16.2M | 16.2M | 16.7M | 16.7M | 16.7M | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.24 x 0.24 | 0.29mm x 0.29mm | 0.29mm x 0.29mm | 0.26mm x 0.26mm | 0.26mm x 0.26mm | 0.25mm x 0.25mm | 0.28mm x 0.28mm |
| | Viewing Angle (V/H) | 160° / 140° | 160° / 140° | 160° / 140° | 170° / 160° | 170° / 160° | 165° / 165° | 178° / 178° |
| | Backlight MTBF (hrs) | 50000 | | | | | 30000 | 30000 |
| Touch | Touch Screen | Resistive type 5-wire single touch window Projected capacitive 2-point touch window | | | | | Projected capacitive 2-point touch window | Projected capacitive 2-point touch window |
| | Touch Controller | Penmount 6000 EETI EXC7200 | | | | | EETI EXC7200 | EETI EXC7200 |
| Motherboard | CPU | Intel® Celeron® Quad-core J1900 SoC 2GHz | 4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor | Intel® Celeron® Quad-core J1900 SoC 2GHz | 4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor | Intel® Celeron® Quad-core J1900 SoC 2GHz | 4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor | 4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor |
| | Chipset | N/A | Intel® H81 | N/A | Intel® H81 | N/A | Intel® H81 | Intel® H81 |
| | RAM | 2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB) | 2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB) | 2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB) | 2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB) | 2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB) | 2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB) | 2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB) |
| | Ethernet | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller | 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller |
| | Audio Codec | Realtek ALC662 HD codec | | | | | | |
| I/O Ports and Switches | | 2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch | 2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch | 2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch | 2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch | 2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch | 2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch | 2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5 SATA HDD bay with anti-shook | | | | | 1 x 2.5 SATA HDD bay with anti-shook or 1 x 3.5 SATA HDD bay with anti-shook | |
| | SSD | 1 x mSATA 2.0 | | | | | | |
| Expansion Slot | | 1 x full-size PCIe mini card 1 x full-size PCIe mini card co-lay mSATA (SATA2) | | | | | | |
| System Cooling | | Fanless | Active with Fan | Fanless | Active with Fan | Fanless | Active with Fan | Active with Fan |
| Environment | Operating Temperature | -10°C~50°C | | | | | | |
| | Storage Temperature | -20°C~60°C | | | | | | |

PPC-F H81 Series

New

Intelligent Industrial Panel PC



- Support iRIS-2400 IEI remote intelligent solution
- Scalable Intel® H81 chipset supports LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor with up to 65W TDP
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch
- Dual full-size PCIe Mini card expansion
- AC/ DC power input options (DC model by build to order manufacturing)



Specifications

| Model | | PPC-F15A | PPC-F17A | PPC-F22A | PPC-F24A |
|---------------------------------|---|---|----------------------|--|--|
| LCD | LCD Display | 15" (4:3) | 17" (5:4) | 21.5" (16:9) | 24" (16:9) |
| | Max Resolution | 1024(W) x 768(H) | 1280(W) x 1024(H) | 1920(W) x 1080(H) | 1920(W) x 1080(H) |
| | Brightness (cd/m²) | 400 | 350 | 250 | 250 |
| | Contrast Ratio | 700 : 1 | 800 : 1 | 1000 : 1 | 3000 : 1 |
| | LCD Color | 16.2M | 16.7M | 16.7M | 16.7M |
| | Pixel Pitch (mm) | 0.29 x 0.29 | 0.26 x 0.26 | 0.25 x 0.25 | 0.28 x 0.28 |
| | Viewing Angle (H-V) | 160° / 140° | 170° / 160° | 170° / 160° | 178° / 178° |
| | Backlight MTBF (Hrs) | 50000 | 50000 | 30000 | 30000 |
| Motherboard | SBC Model | FPFCMB-H81-R10 | | | |
| | CPU | LGA1150 Intel® 4th generation Core™ i7/i5/i3/Pentium®/Celeron® processor up to TDP 65W | | | |
| | Chipset | Intel® H81 | | | |
| | RAM | Support 2 x 204-pin 1066/1333/1600 MHz dual-channel DDR3 SO-DIMM slot (max. 16G) | | | |
| Touch | Touchscreen & Controller | Resistive type 5-wire single touch window/ Penmount 6000 Projected capacitive 2-point touch window/ EETI EXC7200 | | Projected capacitive 2-point touch window/ EETI EXC7200 | Projected capacitive 2-point touch window/EETI EXC7200 |
| Input Interfaces | I/O Ports & Switch | 2 x RJ-45 LAN Port | | 1 x VGA Output | |
| | | 2 x USB 3.0 | | 1 x AC/DC power plug (DC model is by build to order manufacturing) | |
| | | 4 x USB 2.0 | | 1 x AT / ATX Switch | |
| 1 x HDMI output | | 1 x Clear CMOS | | | |
| 4 x RS-232 | | 1 x Reset Button | | | |
| Expansion | 1 x RS-422/485 | | 1 x Power Switch | | |
| | 1 x full size PCIe mini Card 1 x full size PCIe mini Card colay mSATA [SATA2 only] | | | | |
| Drive Bay | | 1 x 2.5" HDD/SSD drive bay | | 1 x 2.5" HDD/SSD drive bay or 1 x 3.5" HDD/SSD drive bay | |
| iRIS Remote Management Solution | | iRIS-2400 slot (optional) | | | |
| Physical | Construction Material | Aluminum front cover and sheet metal rear cover | | | |
| | Mounting | Panel Mount/ Rack Mount/ 100*100 VESA Mount | | Panel Mount/ 100*100 VESA Mount | |
| | Enclosure Color | Black C | | | |
| | Dimension (mm) | 303 x 378.5 x 65.7 | 341.4 x 408.4 x 73.8 | 350.4 x 550.4 x 71.7 | 382 x 600 x 71.7 |
| | Cutout Dimensions (mm) | 285.6 x 361.1 | 323 x 390 | 341 x 536 | 359.6 x 580.4 |
| | Net/ Gross Weight (Kg) | 5.6/ 8.3 | 7.5/10.7 | 10.1/14.4 | 10.5/14.8 |
| Environment | Operating Temperature (with air flow) | -10°C ~ 50°C | | | |
| | Storage Temperature | -20°C ~ 60°C | | | |
| | Humidity | 10% to 95% (non-condensing) | | | |
| | IP Level | Front IP 65 | | | |
| | Safety and EMC | CE & FCC certified | | | |
| Power Supply | AC Input | AC Input ATX Power Supply - P/N: ACE-A622A-RS-11 - 220W Power Supply - Input: 90VAC-264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V1@16A, 12V2@10A, -12V@0.8A | | | |
| | DC Input (produced by order) | DC Input ATX Power Supply - P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 15A(max) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A | | | |

Ordering Information

| Part Number | Description |
|--------------|---|
| 15" | PPC-F15AA-H81i-P/4G/R-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F15AA-H81i-i3/4G/R-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F15AA-H81i-i5/4G/R-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F15AA-H81i-P/4G/PC-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F15AA-H81i-i3/4G/PC-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F15AA-H81i-i5/4G/PC-R10 15" 400 cd/m ² XGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| 17" | PPC-F17AA-H81i-P/4G/R-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F17AA-H81i-i3/4G/R-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F17AA-H81i-i5/4G/R-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10 |
| | PPC-F17AA-H81i-P/4G/PC-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F17AA-H81i-i3/4G/PC-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F17AA-H81i-i5/4G/PC-R10 17" 350 cd/m ² SXGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| 21.5" | PPC-F22AA-H81i-P/4G/PC-R10 21.5" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F22AA-H81i-i3/4G/PC-R10 21.5" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F22AA-H81i-i5/4G/PC-R10 21.5" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| 24" | PPC-F24AA-H81i-P/4G/PC-R10 24" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F24AA-H81i-i3/4G/PC-R10 24" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |
| | PPC-F24AA-H81i-i5/4G/PC-R10 24" 250 cd/m ² FHD Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10 |

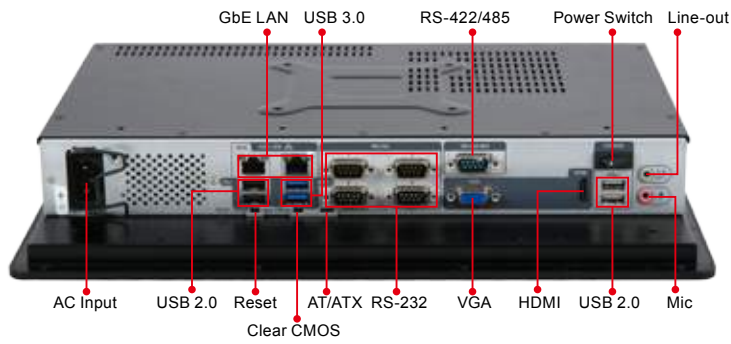
* DC power supply SKU is available with particular purchase.

Options

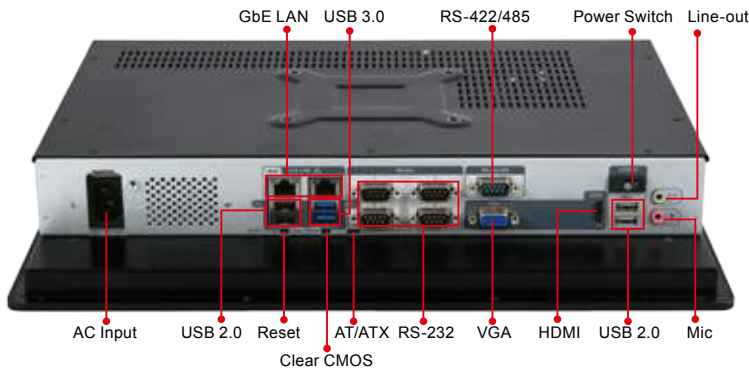
| Item | PPC-F15A | PPC-F17A | PPC-F22A | PPC-F24A |
|--|--|--------------------------------|--------------------------------|--------------------------------|
| ARM | ARM-31-RS | ARM-31-RS | ARM-31-RS | ARM-31-RS |
| Stand | STAND-A21 STAND-A19-RS STAND-C19-R10 | STAND-C19-R10 STAND-A21-R10 | STAND-C19-R10 STAND-A21-R10 | STAND-C19-R10 STAND-A21-R10 |
| Wall Mount Kit | WK-190MS-R10 | | | |
| Panel Mount Kit | FPK-04-R10 | | FPK-05-R10 | FPK-06-R10 |
| Rack Mount Kit | FRK15-R10 | FRK17-R10 | N/A | |
| WiFi Kit | PPC-WL-KIT02-R11 | | PPC-WL-KIT03-R11 | |
| iRIS kit (IEI Remote Intelligent System) | iRIS-2400-R10 | | | |

Packing List

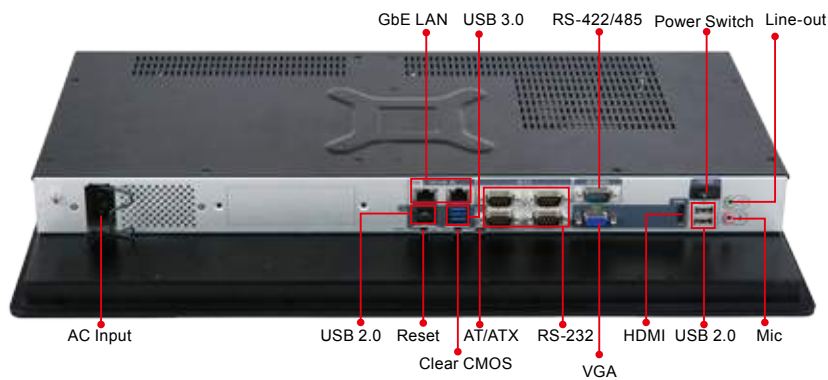
| Item | Q'ty | Remark |
|---------------------|------|----------------------------|
| Driver CD | 1 | |
| One Key Recovery CD | 1 | |
| Power Cord | 1 | Depends on shipping region |
| Screw Kit | 1 | |
| Touch Pen | 1 | Resistive touch only |



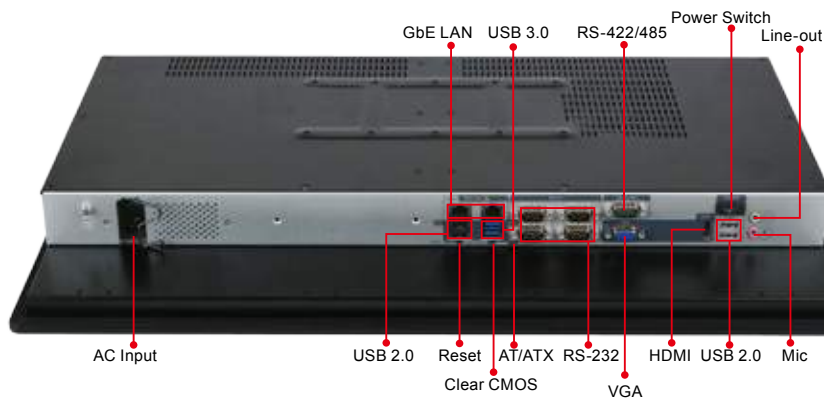
PPC-F15A



PPC-F17A



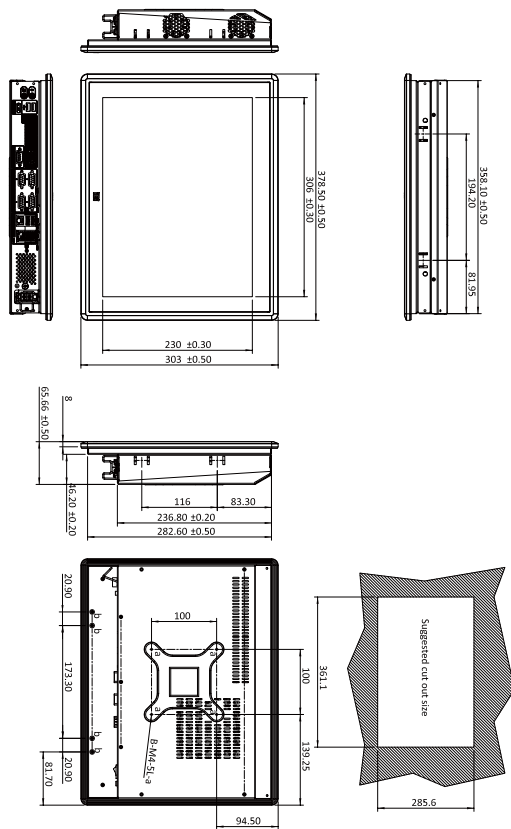
PPC-F22A



PPC-F24A

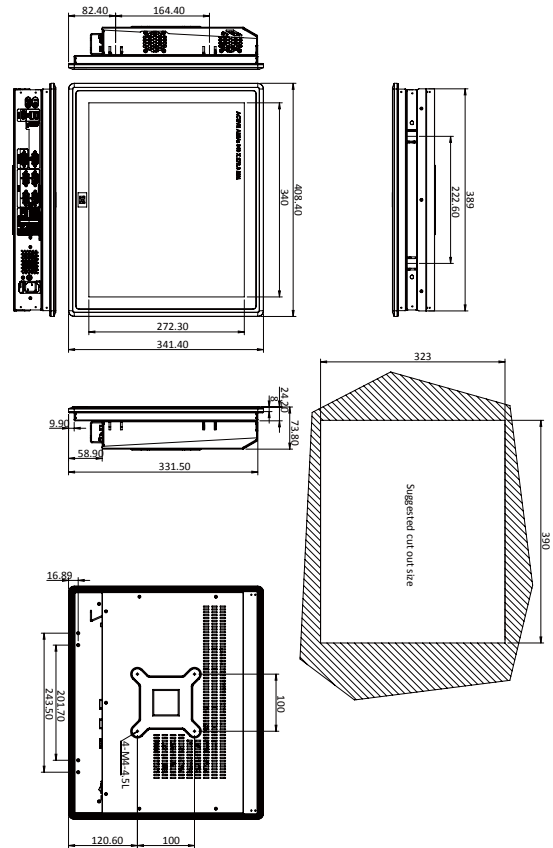
PPC-F15A Dimensions

(Unit: mm)



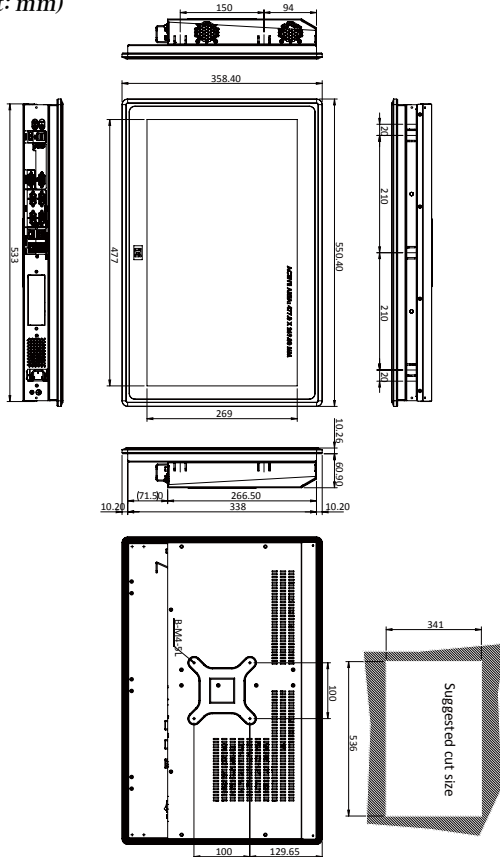
PPC-F17A Dimensions

(Unit: mm)



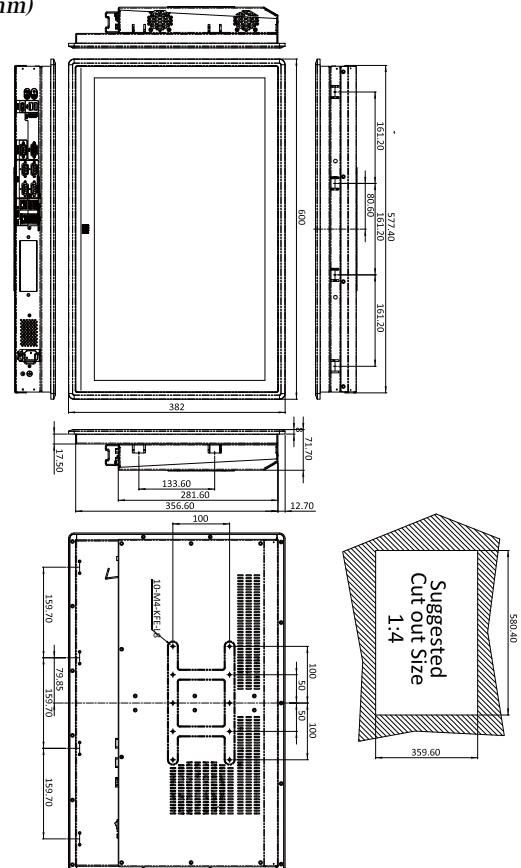
PPC-F22A Dimensions

(Unit: mm)



PPC-F24A Dimensions

(Unit: mm)



Heavy Industrial Panel PC

New

12"/15"/17" Fanless Intel® Bay Trail Solution

Features

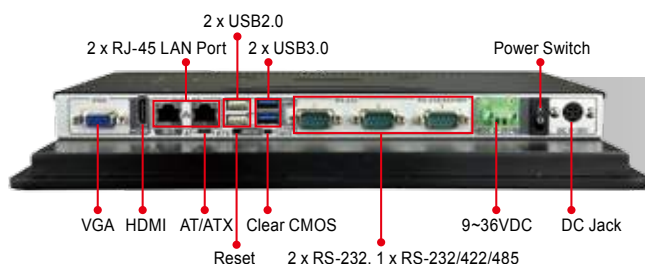
- Support iRIS-2400 IEI remote intelligent solution
- Intel® Celeron® J1900 quad-core SoC
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch and resistive single touch options
- Dual full-size PCIe Mini card expansion
- 9-36V DC wide range DC input



Specifications

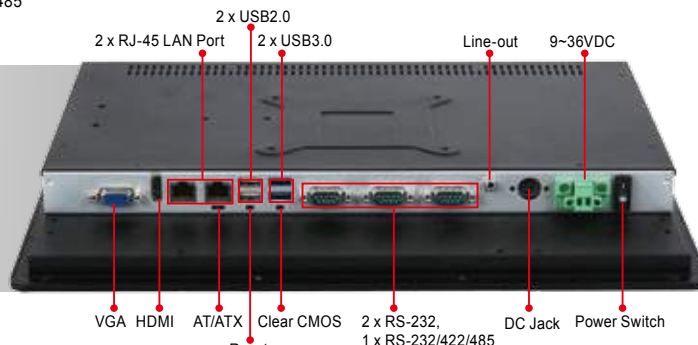
Fanless
Fanless
Fanless

| Model | | PPC-F12B | PPC-F15B | PPC-F17B |
|---------------------------------|---------------------------------------|--|--------------------|----------------------|
| LCD | LCD Display | 12" (4:3) | 15" (4:3) | 17" (5:4) |
| | Max Resolution | 1024 (W) x 768 (H) | 1024 (W) x 768 (H) | 1280 (W) x 1024 (H) |
| | Brightness (cd/m²) | 600 | 400 | 350 |
| | Contrast Ratio | 700 : 1 | 700 : 1 | 800 : 1 |
| | LCD Color | 16.2M | 16.2M | 16.7M |
| | Pixel Pitch (mm) | 0.24 x 0.24mm | 0.29 x 0.29 | 0.26 x 0.26 |
| | Viewing Angle (H-V) | 160° / 140° | 160° / 140° | 170° / 160° |
| | Backlight MTBF (Hrs) | 50000 | 50000 | 50000 |
| Motherboard | SBC Model | PPCFMB-BT-R10 | | |
| | CPU | Intel® Celeron® J1900 on-board quad-core SoC 2GHz | | |
| | RAM | Support two 204-pin DDR3L SO-DIMM slots (max. 8G) | | |
| Touch | Touchscreen & Controller | 5-wire resistive type single touch window/ Penmount 6000 Projected capacitive 2-point touch window/ EETI EXC7200 | | |
| Input Interfaces | I/O Ports & Switch | 2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC jack (4-pin) 1 x Terminal block 1 x Line-out (PPC-F15B and PPC-17B only) 1 x Power switch | | |
| | Expansion | 1 x Full-size PCIe Mini card slot 1 x Full-size PCIe Mini card slot colay mSATA (SATA2 only) | | |
| Drive Bay | | 1 x 2.5" HDD/SSD drive bay | | |
| iRIS Remote Management Solution | | iRIS-2400 slot | | |
| Physical | Construction Material | Aluminum front cover and sheet metal rear cover | | |
| | Mounting | Panel Mount/ Rack Mount/ 100 x 100 VESA Mount | | |
| | Enclosure Color | Black C | | |
| | Dimensions (mm) (W x L x D) | 262.2 x 322.2 x 47.2 | 303 x 378.5 x 46.2 | 341.4 x 408.4 x 51.8 |
| | Cutout Dimensions (mm) | 244.8 x 304.8 | 285.6 x 361 | 323 x 390 |
| Environment | Operating Temperature (with air flow) | -10°C ~ 50°C | | |
| | Storage Temperature | -20°C ~ 60°C | | |
| | Humidity | 10% to 95% (non-condensing) | | |
| | IP Level | Front IP 65 | | |
| | Safety and EMC | CE & FCC certified | | |
| Power Input | | 9 - 36 V DC | | |

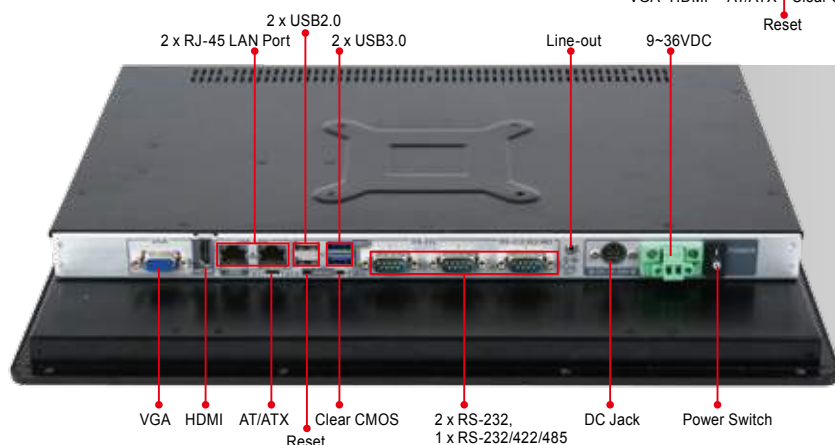


PPC-F12B

PPC-F15B



PPC-F17B



Ordering Information

| Part Number | Description |
|-------------|---|
| 12" | PPC-F12B-BTi-J1/2G/R-R10 12" 600 cd/m ² XGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, resistive touch window, R10 |
| | PPC-F12B-BTi-J1/2G/PC-R10 12" 600 cd/m ² XGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R10 |
| 15" | PPC-F15B-BTi-J1/2G/R-R10 15" 400 cd/m ² XGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, resistive touch window, R10 |
| | PPC-F15B-BTi-J1/2G/PC-R10 15" 400 cd/m ² XGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R10 |
| 17" | PPC-F17B-BTi-J1/2G/R-R10 17" 350 cd/m ² SXGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, resistive touch window, R10 |
| | PPC-F17B-BTi-J1/2G/PC-R10 17" 350 cd/m ² SXGA Panel PC with Intel® Celeron® Processor J1900, TDP 10W, one 2 GB RAM, support iRIS-2400, black color, 9-36V DC input, projected capacitive touch window, R10 |

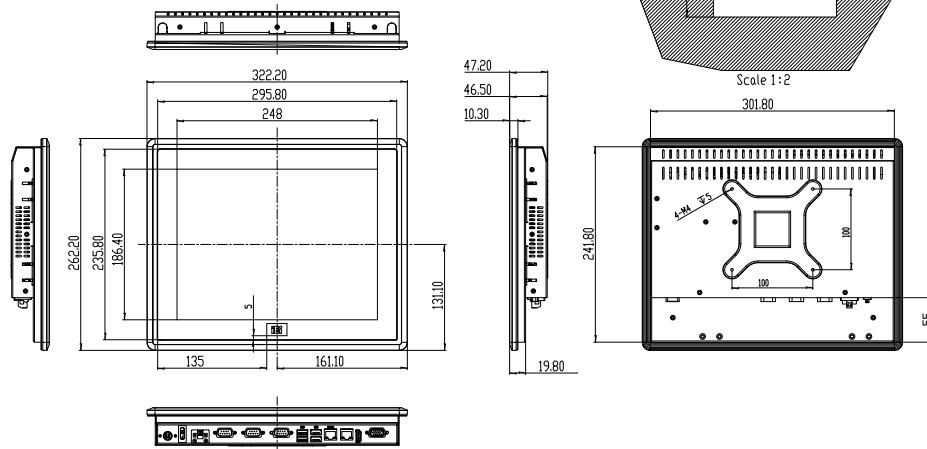
Options

| Item | PPC-F12B | PPC-F15B | PPC-F17B |
|--|------------------------|------------------------|------------------------|
| ARM | ARM-31-RS | ARM-31-RS | ARM-31-RS |
| Stand | STAND-C12 STAND-A12 | STAND-C19 STAND-A19 | STAND-C19 STAND-A19 |
| Wall Mount Kit | WK-190MS-R10 | | |
| Panel Mount Kit | FPK-01-R10 | FPK-04-R10 | FPK-04-R10 |
| Rack Mount Kit | FRK12-R10 | FRK15-R10 | FRK17-R10 |
| Wi-Fi Kit | PPC-WL-KIT02-R11 | | |
| iRIS Kit (IEI Remote Intelligent System) | iRIS-2400-RS | | |

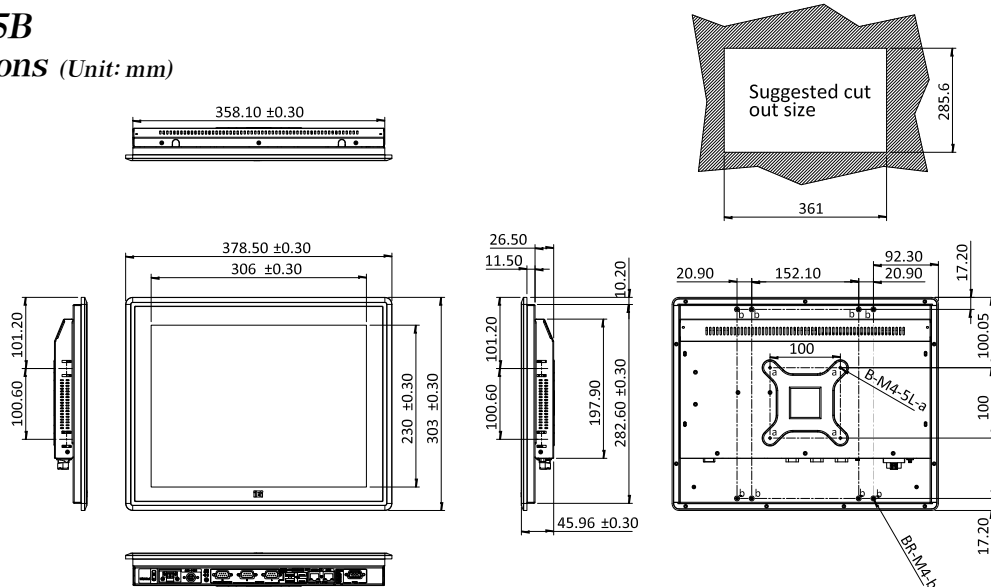
Packing List

| Item | Q'ty | Remark |
|---------------------|------|----------------------------|
| Driver CD | 1 | |
| One Key Recovery CD | 1 | |
| Touch Pen | 1 | Resistive touch only |
| Power Cord | 1 | Depends on shipping region |

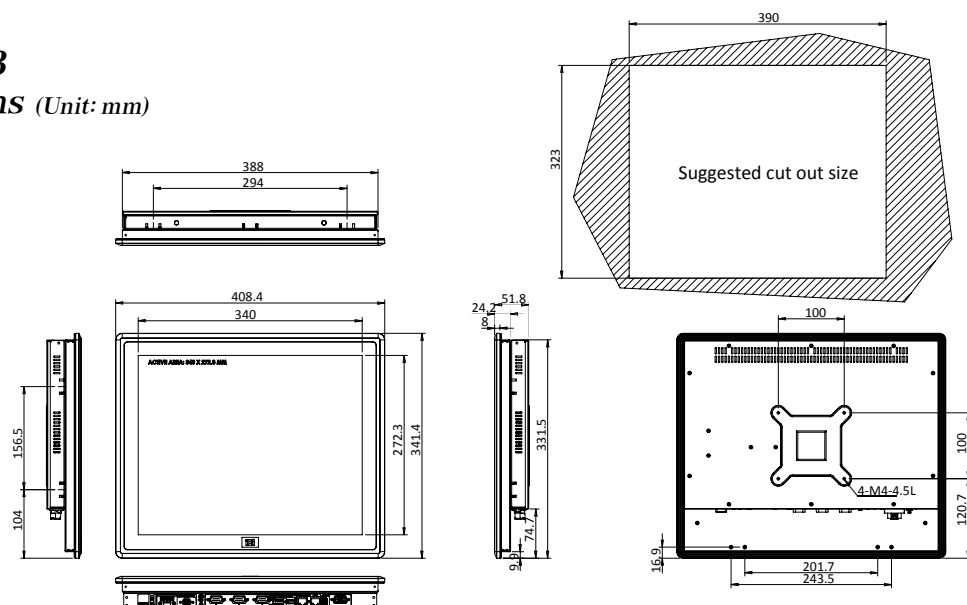
PPC-F12B **Dimensions (Unit: mm)**



PPC-F15B **Dimensions (Unit: mm)**



PPC-F17B **Dimensions (Unit: mm)**



Heavy Industrial PPC Series

Robust Product Design

IP Protection Improvement

The PPC series is equipped with robust front panel for water protection and tightly front assembly against the component from any direction.

IP Code Table

The IP Code (International Protection Rating) consists of the letters IP followed by two digits.

| Solids | | Liquids | |
|----------------------------|---|------------------|----------------------------|
| First Numerical | | Second Numerical | |
| No Protection | 0 | 0 | No Protection |
| Objects Greater than 50mm | 1 | 1 | Vertically Dripping Water |
| Objects Greater than 12mm | 2 | 2 | 75o-90o Sprayed water |
| Objects Greater than 2.5mm | 3 | 3 | 30o-90o Sprayed water |
| Objects Greater than 1.0mm | 4 | 4 | Water sprayed-low pressure |
| Dust-Protected | 5 | 5 | Water jets-low pressure |
| Dust-Tight | 6 | 6 | Water jets-high pressure |
| IP 66 Compliant! | | 7 | Temporary immersion |
| | | 8 | Indefinite Immersion |



PPC Series

Wide Temperature Range (-20°C~60°C)

The PPC-5150A-H61/ PPC-5170A-H61 and UPC-V315 supports wide operating temperature, surviving from any kinds of harsh environment.



High Efficiency Transmission

SFP Fiber LAN

The small form-factor pluggable transceiver (SFP) is a compact, hot-pluggable transceiver used for both telecommunication and data communication applications.

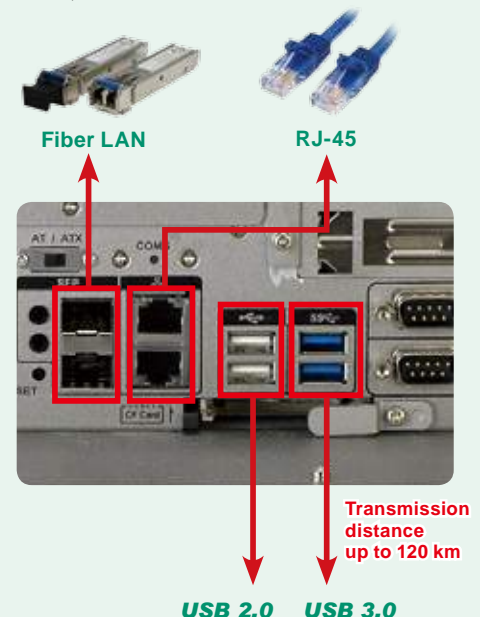
- Immunity to electromagnetic interference
- High electrical resistance
- No sparks
- Long transmission distance – up to 2 km (multi-mode)/ 120 km(single-mode)

Transmission distance

| Type | Core diameter | Wavelength (nm) | Cost | Max Distance (km) |
|-------------|---------------|-----------------|----------------|-------------------|
| Single-Mode | 8 to 10 | 1310 or 1550 | More expensive | 120 ★ |
| Multi-Mode | 50 or 62.5 | 850 or 1300 | Medium | 2 |
| RJ-45 | N/A | N/A | Cheaper | 0.1 |

Multiple choices

We provide two transmission LAN types for choice, either 2 × Fiber LAN or 2 × RJ-45.



USB 3.0 – Faster Data Transmission

USB 3.0 has higher transmission speed and wider data bandwidth. Support faster transferring for the user.

| USB Version | USB 1.0 | USB 2.0 | USB 3.0 |
|---------------------|---------------|----------|----------|
| Data Transfer Rate) | 12Mbps | 480Mbps | 5Gbps ★ |
| Media (Data Size) | Transfer Time | | |
| Song / Pic (4 MB) | 5.3 sec | 0.1 sec | 0.01 sec |
| HD-Movie (25GB) | 9.3 hr | 13.9 min | 70 sec |

PPC Series 8.4"~12.1" PPC Selection Guide



| LCD Size | | 8.4" | | 10.4" | | 12.1" | |
|------------------------|---------------------------------|---|--|---|--|---|---|
| Model | | PPC-3708A-N26 | PPC-3708A-N270 | PPC-3710A-N26 | PPC-3710A-N270 | PPC-3712A-N26 | PPC-3712A-N270 |
| Display | LCD Size | 8.4 " | 8.4 " | 10.4 " | 10.4 " | 12.1 " | 12.1 " |
| | Max Resolution | 800(W) x 600(H) | 800(W) x 600(H) | 800(W) x 600(H) | 800(W) x 600(H) | 1024(W) x 768(H) | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 450 | 450 | 400 | 400 | 500 | 500 |
| | Contrast Ratio | 600:1 | 600:1 | 700:1 | 700:1 | 700:1 | 700:1 |
| | LCD Color | 262K | 262K | 262K | 262K | 262K | 262K |
| | Pixel Pitch (mm) (HxV) | 0.213(H) x 0.213(V) | 0.213(H) x 0.213(V) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | 0.3075(H) x 0.3075(V) | 0.3075(H) x 0.3075(V) |
| | Viewing Angle (V/H) | 140°/ 160° | 140°/ 160° | 140°/ 160° | 140°/ 160° | 160°/ 160° | 160°/ 160° |
| | Backlight MTBF (hrs) | 50000 (LED backlight) | | | | | |
| Touch | Touch Screen | Resistive Type 4-Wire with RS-232 interface | | Resistive Type 5-Wire with RS-232 interface | | | |
| | Touch Controller | EETI MBMER4040CPBG | EETI MBMER4040CPBG | EETI MBMER4050CMBG | EETI MBMER4050CMBG | EETI MBMER4050CMBG | EETI MBMER4050CMBG |
| Motherboard | CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ N270 1.6GHz CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ process N270 1.6GHz CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ processor N270 1.6GHz CPU |
| | Chipset | Intel® NM10 | Intel® 945GSE + ICH7M | Intel® NM10 | Intel® 945GSE + ICH7M | Intel® NM10 | Intel® 945GSE + ICH7M |
| | RAM | One 204-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting 800 MHz DDR3 module up to 2GB | One 204-pin SO-DIMM socket, supporting 533 MHz DDR2 module for up to 2GB |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | | | | | |
| | Audio Codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec |
| I/O Ports and Switches | | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5 SATA HDD Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5 SATA HDD Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD Bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | 1 x mSATA (SATA2) | CF Type II | 1 x mSATA (SATA2) | CF Type II | 1 x mSATA (SATA2) | CF Type II |
| | CD-ROM Driver Bay | - | - | - | - | Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | 1 x PCIe mini card | | | | | |
| System Cooling | | Fanless | | | | | |
| Environment | Operating Temperature | -10°C~50°C | | | | | |
| | Storage Temperature | -20°C~60°C | | | | | |

PPC Series 15" ~ 19" PPC Selection Guide



| LCD Size | | 15" | | 17" | 19" |
|------------------------|---------------------------------|--|---|---|--|
| Model | | PPC-5150A-H61 | PPC-5152-D525 | PPC-5170A-H61 | PPC-5190A-H61 |
| Display | LCD Size | 15 " | 15 " | 17 " | 19 " |
| | Max Resolution | 1024(W) x 768(H) | 1024(W) x 768(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) |
| | Brightness (cd/m ²) | 400 | 400 | 350 | 350 |
| | Contrast Ratio | 700:1 | 500 : 1 | 800 : 1 | 1000 : 1 |
| | LCD Color | 16.2M | 16.2M | 16.7M | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | 0.1095(H) x 0.1095(V) | 0.264(H) x 0.264(V) | 0.294(H) x 0.294(V) |
| | Viewing Angle (V/H) | 125°/ 140° | 160° / 140° | 160°/ 160° | 160°/ 170° |
| | Backlight MTBF (hrs) | 50000 | | | |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | | | |
| | Touch Controller | DMC 9000 | | | |
| Motherboard | CPU | 2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor | Intel® Atom™ D525 1.8GHz dual core processor | 2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor | 2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor |
| | Chipset | Intel® H61 | Intel® ICH8M | Intel® H61 | Intel® H61 |
| | RAM | Two 204-pin DDR3 SO-DIMM slots (Max. 16GB) | One 204-pin DDR3 SO-DIMM slot (Max. 4GB) | Two 204-pin DDR3 SO-DIMM slots (Max. 16GB) | Two 204-pin DDR3 SO-DIMM slots (Max. 16GB) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| | Audio Codec | Realtek ALC662 audio codec | Realtek ALC888 audio codec | Realtek ALC662 audio codec | Realtek ALC662 audio codec |
| I/O Ports and Switches | | 4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot | 2 x RS-232 (DB-9) 1 x RS-232 or RS-422/485 (DB-9) 2 x RS-422/485 (RJ-45) 2 x USB 2.0 VGA port (DB-15) 2 x Audio jacks (Line-out, MIC) AT/ATX switch 2 x USB 3.0 connector 2 x Combo (SFP / RJ-45) Gigabit LAN 4-channel video / audio capture (optional) | 1 x RS-232/422/485 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | 2.5" SATA HDD bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II, mSATA (SATA2) | CF Type II socket | CF Type II, mSATA (SATA2) | CF Type II, mSATA (SATA2) |
| | CD-ROM Driver Bay | Slim Type CD-ROM Bay | N/A | Slim Type CD-ROM Bay | Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI slot or 1 x PCIe slot, | Two PCI slots or one PCI slot plus one PCIe x1 slot | Either 1 x PCI slot or 1 x PCIe slot | Either 1 x PCI slot or 1 x PCIe slot |
| | | 1 x PCIe Mini card | | | |
| System Cooling | | Active with Fan | Fanless | Active with Fan | Active with Fan |
| Environment | Operating Temperature | -20°C ~ 60°C | -20°C ~ 50°C | -20°C ~ 60°C | -10°C ~ 50°C |
| | Storage Temperature | -30°C ~ 70°C | -20°C ~ 70°C | -30°C ~ 70°C | -20°C ~ 60°C |

8.4" Industrial Panel PC

PPC-3708A-N26Intel® Atom™ N2600 Dual-Core Processor **Fanless****PPC-3708A-N270**Intel® Atom™ N270 Processor **Fanless****Features**

- 8.4" 450 nits high brightness TFT LCD with LED backlight
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity suggested)

**Specifications**

| Model | | PPC-3708A-N26 | PPC-3708A-N270 |
|------------------------|---------------------------------|---|---|
| Display | LCD Size | 8.4 " | |
| | Max Resolution | 800(W) x 600(H) | |
| | Brightness (cd/m ²) | 450 | |
| | Contrast Ratio | 600:1 | |
| | LCD Color | 262K | |
| | Pixel Pitch (mm) (HxV) | 0.213(H) x 0.213(V) | |
| | Viewing Angle (V/H) | 140°/160° | |
| | Backlight MTBF (hrs) | 50000 (LED Backlight) | |
| Touch | Touch Screen | Resistive Type 4-Wire with RS-232 interface | |
| | Touch Controller | EETI MBMER4040CPBG | |
| Motherboard | SBC | NANO-CV-N26001 | NANO-945GSE-N270 |
| | CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ process N270 1.6GHz CPU |
| | Chipset | Intel® NM10 | Intel® 945GSE + ICH7M |
| | RAM | One 204-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| | Audio Codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec |
| I/O Ports and Switches | | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | 1 x mSATA (SATA2 Signal) | CF Type II |
| Expansion Slot | | 1 x PCIe Mini card | 1 x PCIe Mini card |
| Physical | Front Panel Construction | Aluminum Die-casting | |
| | Chassis Construction | Heavy-duty Steel (SECC) | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 244 x 175 x 86.5 | 244 x 178 x 80.2 |
| | Cut Out Dimensions (WxH) (mm) | 233 x 167 | 233 x 167 |
| | Net /Gross Weight | 2.2Kg/ 4.4Kg | 2.2 Kg / 4.4 Kg |
| System Cooling | | Fanless | Fanless |
| Environment | Operating Temperature | -10°C ~ 50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | |
| | IP Rating | IP66 compliant front panel | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Power Supply | Power Adapter | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC |

Versatile Mounting Methods



Wall Mount



Stand



Panel Mount



Rack Mount



Ordering Information

| Part No. | | Description |
|--------------------|-------------------------|--|
| Intel® Atom™ N2600 | PPC-3708A-N26/R/2G-R11* | 8.4" 450 cd/m ² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, touch screen, 9~28VDC input, RoHS |
| Intel® Atom™ N270 | PPC-3708A-N270/R/1G-R22 | 8.4" 450 cd/m ² SVGA Panel PC with Intel® Atom™ N270 1.6GHz/ 512KB L2 cache processor, 1GB DDR2 RAM, touch screen, 12VDC input. R22, RoHS |

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product includes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

| Item | Part No. | Description |
|------------------------------------|---------------------|---|
| Screw Kit | 19600-000205-RS | |
| Power Cord | 63040-010060-040-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V) |
| Power Adapter | 63040-010060-050-RS | 60W, 90VAC~264VAC for PPC-3708A-N270 & PPC-3708A-N26 |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6-pin MALE; 2 x MINI DIN 6-pin FEMALE |
| Panel Mounting Kit | 19Z00-000026-RS | 19Z00-000026-RS x8 |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | | |
| User Manual & Driver CD | | |

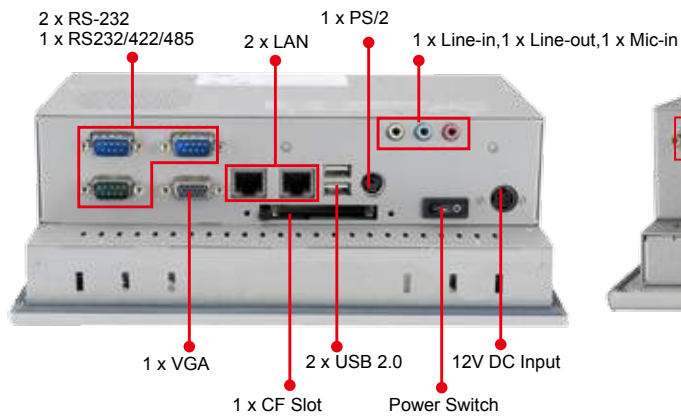
IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-084MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

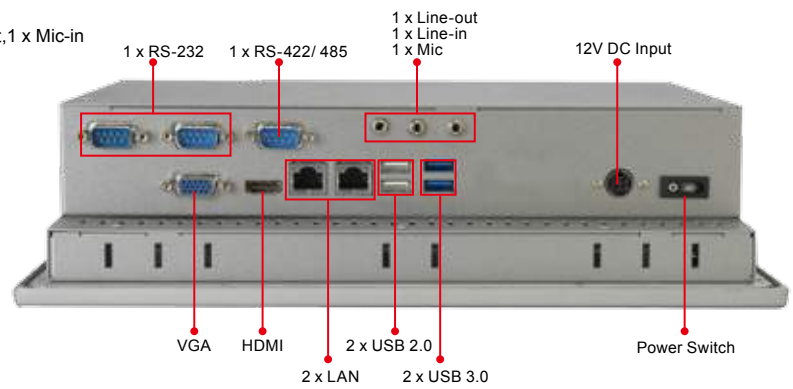
Options

| Item | Part No. | Description |
|------------------|---------------------|---|
| RS-422/485 Cable | 32200-075202-RS | (A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE |
| HDD IDE Cable | 32221-000200-100-RS | 100MM, IDE 44-pin |
| Wi-Fi Module | PPC-WL-KIT02-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified) |

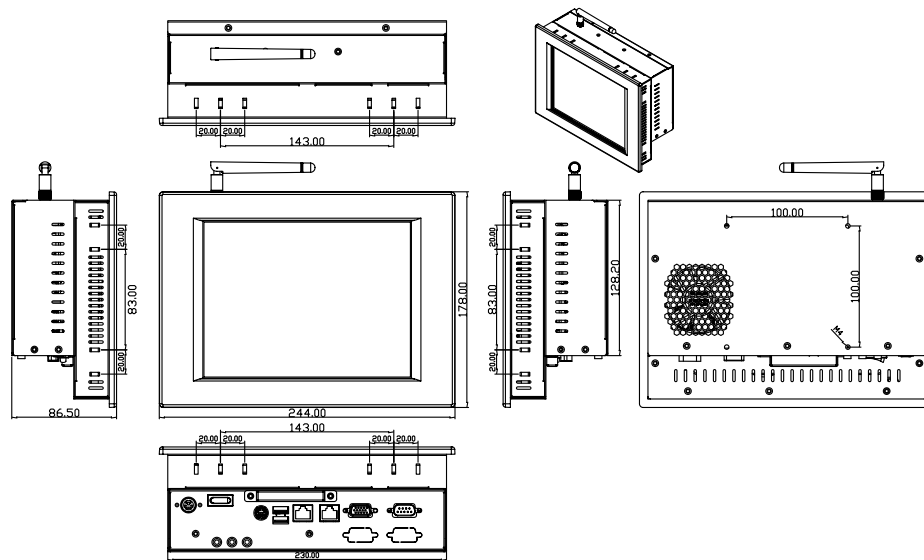
PPC-3708A Fully Integrated I/O



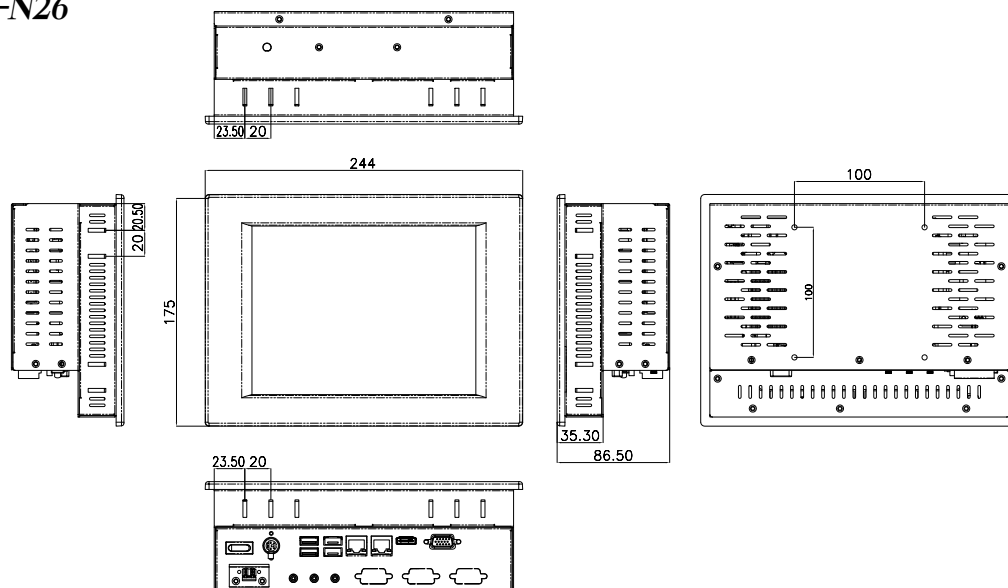
PPC-3708A-N26 Fully Integrated I/O



PPC-3708A Dimensions (Unit: mm)



PPC-3708A-N26 Dimensions (Unit: mm)



10.4" Industrial Panel PC

PPC-3710A-N26Intel® Atom™ N2600 Dual-Core Processor **Fanless****PPC-3710A-N270**Intel® Atom™ N270 Processor **Fanless****Features**

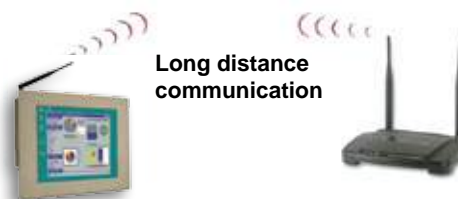
- 10.4" 400 nits high brightness TFT LCD with LED backlight
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Robust aluminum front bezel and metal casing compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

**Specifications**

| Model | | PPC-3710A-N26 | PPC-3710A-N270 |
|------------------------|-------------------------------|---|---|
| Display | LCD Size | 10.4" | |
| | Max Resolution | 800(W) x 600(H) | |
| | Brightness (cd/m²) | 400 | |
| | Contrast Ratio | 700:1 | |
| | LCD Color | 262K | |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) | |
| | Viewing Angle (V/H) | 140°/160° | |
| | Backlight MTBF (hrs) | 50000 (LED Backlight) | |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | |
| | Touch Controller | EETI MBMER4050CMBG | |
| Motherboard | SBC | NANO-CV-N26001 | NANO-945GSE-N270 |
| | CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ N270 1.6GHz CPU |
| | Chipset | Intel® NM10 | Intel® 945GSE + ICH7M |
| | RAM | One 204-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB | One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | |
| | Audio Codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec |
| I/O Ports and Switches | | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | 1 x mSATA (SATA2 Signal) | CF Type II |
| Expansion Slot | | 1 x PCIe Mini card | 1 x PCIe Mini card |
| Physical | Front Panel Construction | Aluminum Die-casting | |
| | Chassis Construction | Heavy-duty Steel (SECC) | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 311 x 242 x 77.8 | 311.5 x 242 x 77.8 |
| | Cut Out Dimensions (WxH) (mm) | 291 x 221 | 291 x 221 |
| | Net /Gross Weight | 3.4Kg / 5.8Kg | 3.4 Kg / 5.8 Kg |
| System Cooling | | Fanless | Fanless |
| Environment | Operating Temperature | -10°C~50°C | |
| | Storage Temperature | -20°C~60°C | |
| | IP Rating | IP66 compliant front panel | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Power Supply | Power Adapter | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC |

802.11b/g/n Wireless LAN Module

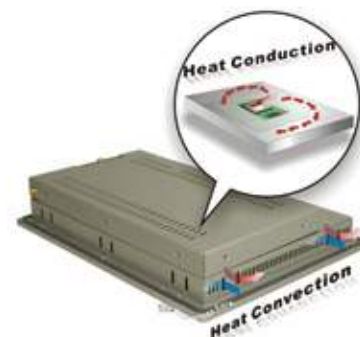
The PPC 37 series is equipped with a high speed wireless module that enables larger data transmission in real time. The Wireless LAN facilitates applications that require data transmission over large distances, such as in a large warehouse.



Long distance communication

Fanless System

The PPC-3710A is designed with a low power consumption platform featuring an Intel® Atom™ N270 and N2600 platform. The fanless system generates less heat while maintaining above-average performance. A fanless design eliminates the possibility of fan failure and extends the operation life of the device.



Ordering Information

| Part No. | | Description |
|--------------------|-------------------------|---|
| Intel® Atom™ N2600 | PPC-3710A-N26/R/2G-R11* | 10.4" 400 cd/m ² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS |
| Intel® Atom™ N270 | PPC-3710A-N270/R/1G-R22 | 10.4" 400 cd/m ² SVGA TFT Fanless Panel PC, Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Silver Color, R22, RoHS |

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product includes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

| Item | Part No. | Description |
|------------------------------------|---------------------|--|
| Screw Kit | 19600-000205-RS | |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Power Adapter | 63040-010060-050-RS | 60W, 90VAC~264VAC for PPC-3710A-N270, PPC-3710-N26 |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE |
| Panel Mounting Kit | 19Z00-000026-RS | 19Z00-000026-RS x10 |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | | |
| User Manual & Driver CD | | |

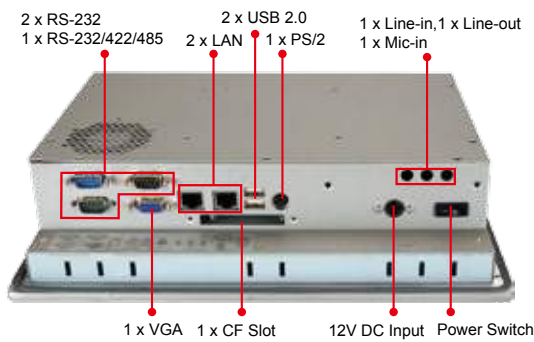
IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-104MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

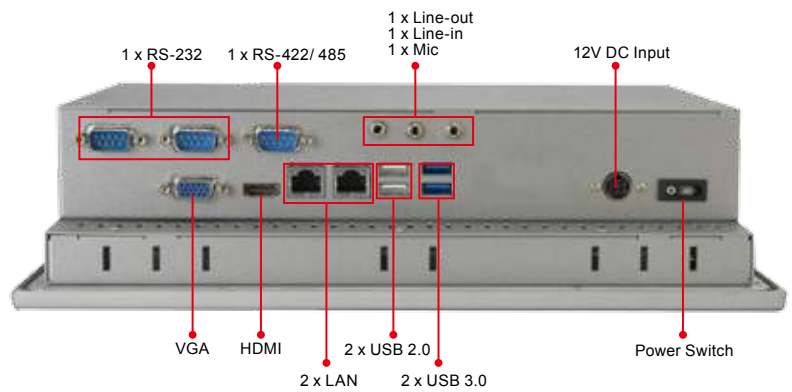
Options

| Item | Part No. | Description |
|------------------|------------------|---|
| RS-422/485 Cable | 32200-075202-RS | (A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE |
| Wi-Fi Module | PPC-WL-KIT02-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified) |

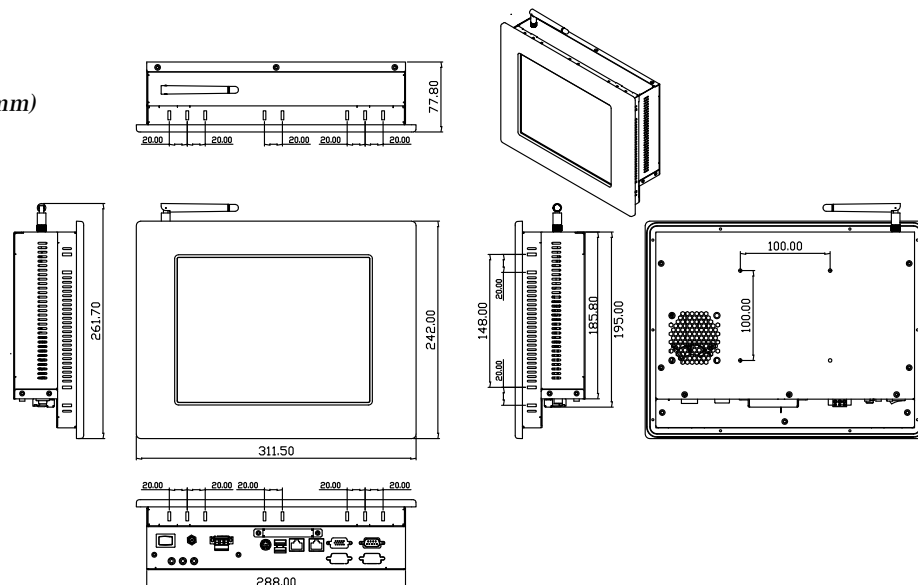
PPC-3710A Fully Integrated I/O



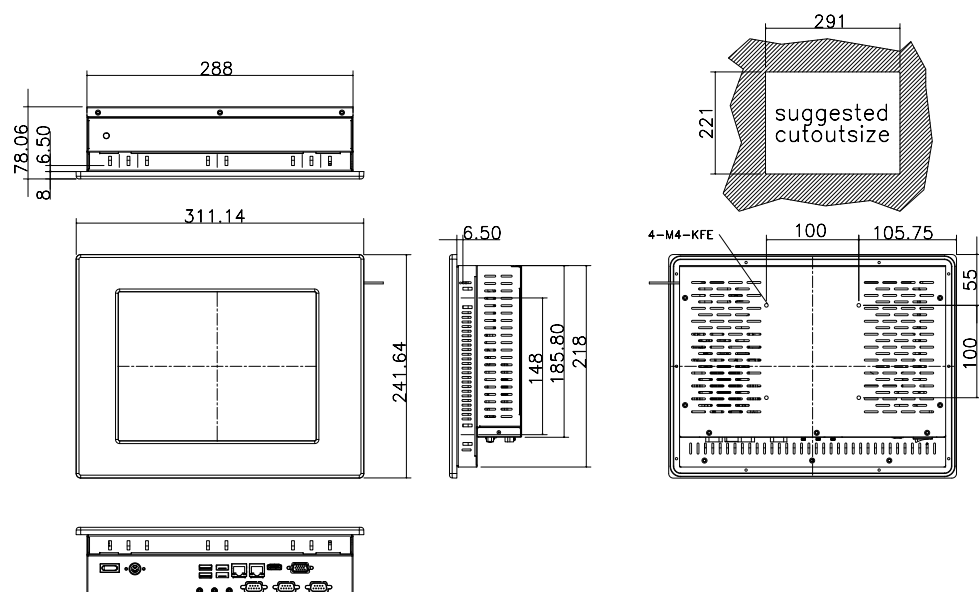
PPC-3710A-N26 Fully Integrated I/O



PPC-3710A Dimensions (Unit: mm)



PPC-3710A-N26 Dimensions (Unit: mm)



12.1" Industrial Panel PC
PPC-3712A-N26

Intel® Atom™ N2600 Dual-Core Processor

Fanless
PPC-3712A-N270

Intel® Atom™ N270 Processor

Fanless

Features

- 12.1" 500 nits high brightness TFT LCD with LED backlight
- Dual Gigabit Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional 802.11 b/g/n wireless kit
- One slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 65 compliant front panel


Specifications

| Model | | PPC-3712A-N26 | PPC-3712A-N270 |
|------------------------|-------------------------------|---|---|
| Display | LCD Size | 12.1" | |
| | Max Resolution | 1024(W) x 768(H) | |
| | Brightness (cd/m²) | 500 | |
| | Contrast Ratio | 700:1 | |
| | LCD Color | 262K | |
| | Pixel Pitch (mm) (HxV) | 0.3075(H) x 0.3075(V) | |
| | Viewing Angle (V/H) | 160°/160° | |
| | Backlight MTBF (hrs) | 50000 (LED Backlight) | |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | |
| | Touch Controller | EETI MBMER4050CMBG | |
| Motherboard | SBC | NANO-CV-N26001 | NANO-945GSE-N270 |
| | CPU | Intel® Atom™ N2600 dual-core processor 1.6GHz | Intel® Atom™ N270 1.6GHz CPU |
| | Chipset | Intel® NM10 | Intel® 945GSE + ICH7M |
| | RAM | One 200-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB | One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | |
| | Audio codec | Realtek ALC662 HD audio codec | Realtek ALC655 AC'97 audio codec |
| I/O Ports and Switches | | 2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Drive Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | 1 x mSATA (SATA2 Signal) | CF Type II |
| | CD-ROM Drive Bay | Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | 1 x PCIe Mini card | 1 x PCIe Mini card |
| Physical | Front Panel Construction | Aluminum Die-casting | |
| | Chassis Construction | Heavy-duty Steel (SECC) | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 340 x 260 x 74.8 | 340 x 277 x 73.4 |
| | Cut Out Dimensions (WxH) (mm) | 313 x 233 | 313 x 233 |
| | Net/Gross Weight | 6 Kg / 8 Kg | 6 Kg / 8 Kg |
| System Cooling | | Fanless | Fanless |
| Environment | Operating Temperature | -10°C~50°C | |
| | Storage Temperature | -20°C~60°C | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Power Supply | Power Adapter | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC |

Ordering Information

| Part No. | | Description |
|--------------------|-------------------------|--|
| Intel® Atom™ N2600 | PPC-3712A-N26/R/2G-R11* | 12.1" 500 cd/m² XGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS |
| Intel® Atom™ N270 | PPC-3712A-N270/R/1G-R22 | 12.1" 500 cd/m² XGA fanless panel PC, Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Sliver Color, R22, RoHS |

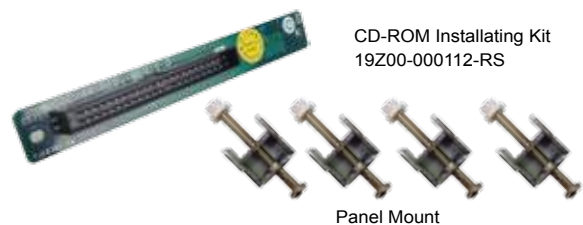
* PPC supports 9-28V DC input with 4-pin DC jack. Standard product includes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

| Item | Part No. | Description |
|------------------------------------|---------------------|--|
| Screw Kit | 19600-000207-RS | |
| SATA CD-ROM Cable | 32801-006300-100-RS | SATA 7+6P FEMALE 180°; SATA 7P FEMALE 90°+LOCK; DU PONT 2*4P P=2.54 FEMALE |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Power Adapter | 63040-010060-050-RS | 60W, 90VAC~264VAC for PPC-3712A |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE |
| Panel Mounting Kit | 19Z00-000024-RS | 19Z00-000024-RS x8 |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | | |
| User Manual & Driver CD | | |

IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-121MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

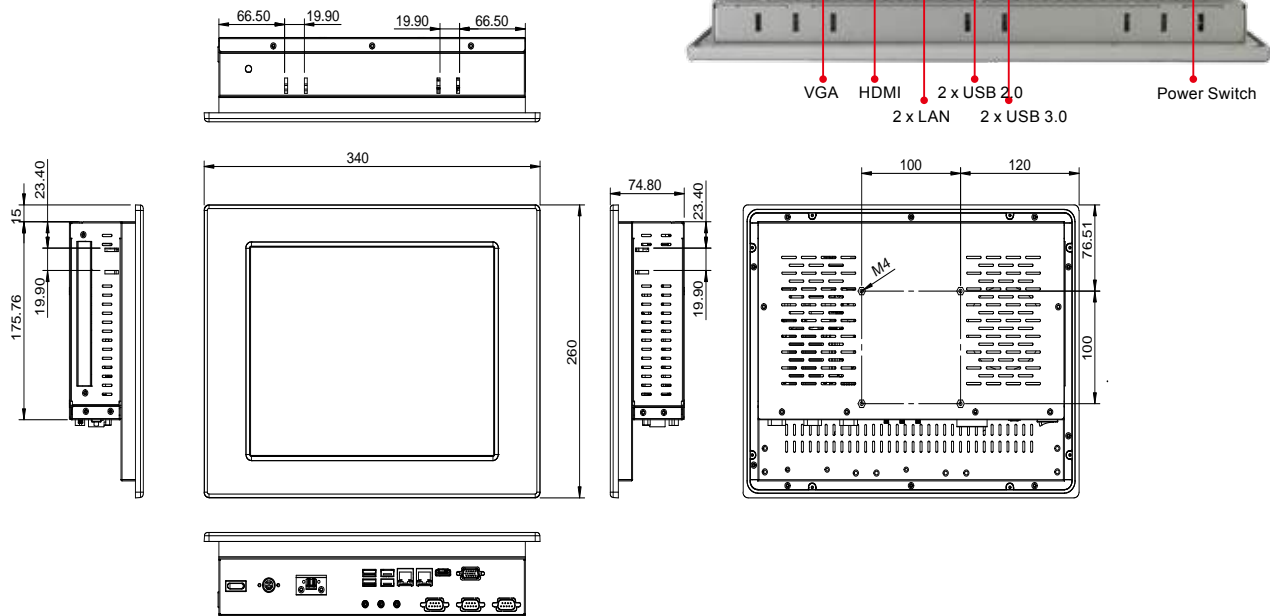


Options

| Item | Part No. | Description |
|---------------------------|------------------|---|
| RS-422/485 Cable | 32200-075202-RS | (A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE |
| IDE CD-ROM Installing Kit | 19Z00-000112-RS | 50-pin CD ROM connector to 44-pin IDE connector transfer board |
| HDD IDE Cable | 32200-000037-RS | 250MM, IDE 44-pin |
| Wi-Fi Module | PPC-WL-KIT02-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified) |

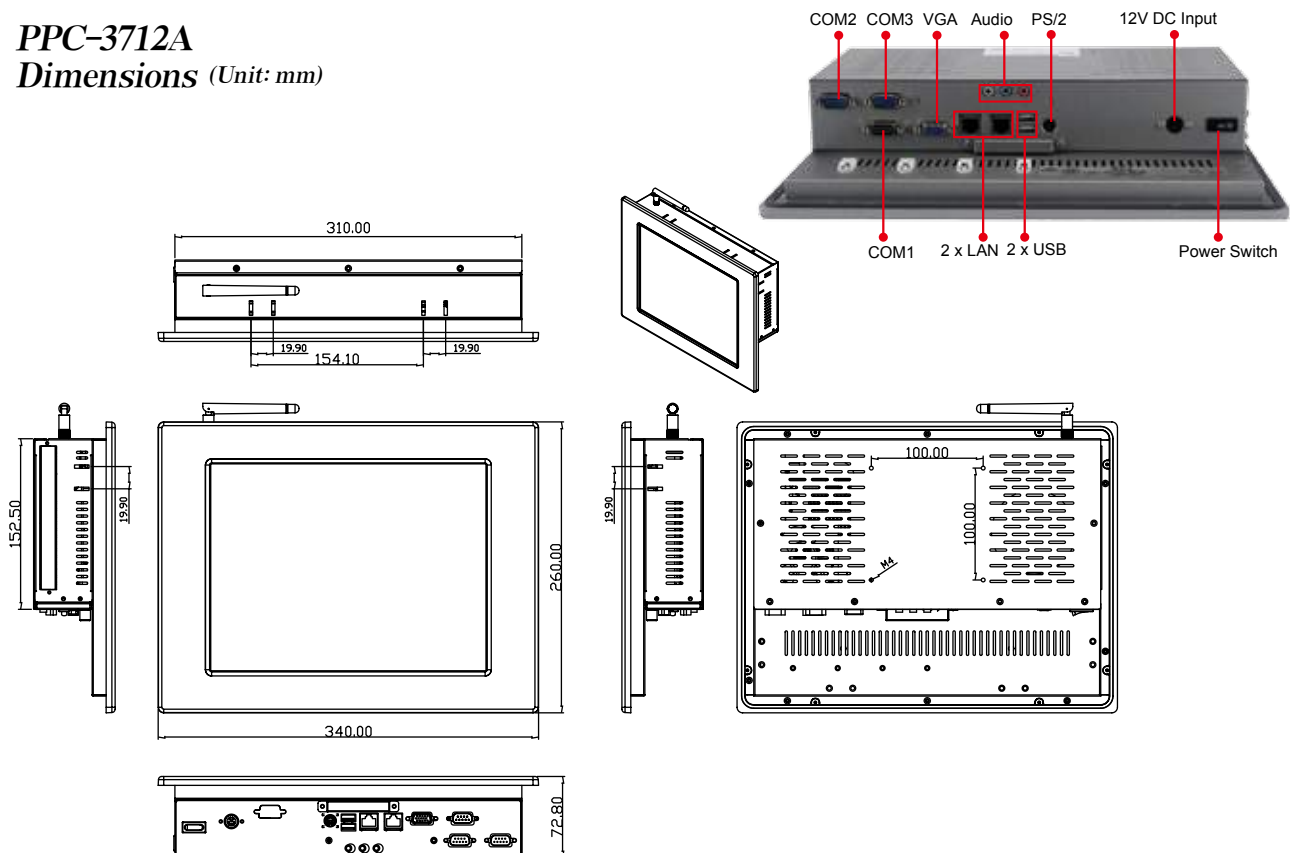
PPC-3712A-N26

Dimensions (Unit: mm)



PPC-3712A

Dimensions (Unit: mm)



15" Industrial Panel PC

PPC-5152-D525-E

15" Flat-bezel Industrial Panel PC

New**Combo Gigabit LAN**
(SFP Fiber/RJ-45)*Features*

- Robust aluminum with IP 64 compliant front bezel design
- 5-wire resistive touch
- Intel® Atom™ D525 1.8GHz dual-core with fan-less design
- 15" 400 nits LED backlight panel with 1024 x 768 resolution
- Two USB 3.0, two USB 2.0 and five COM ports available
- Flexible expansion interface (two PCI slots or one PCI slot + one PCIe slot)
- Dual (10/100/1000BASE-T(X)) gigabit LAN ports

*Specifications*

| Model | | PPC-5152-D525-E/R/1G-R10 |
|------------------------|---------------------------------|--|
| Display | LCD Size | 15" |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 400 |
| | Contrast Ratio | 500:1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.1095(H) x 0.1095(V) |
| | Viewing Angle (V/H) | 160° / 140° |
| | Backlight MTBF (hrs) | 50,000 |
| Touch | Touchscreen & Controller | Resistive Type 5-Wire with RS-232 interface / DMC 9000 |
| | Hardness | ≥3H (follows JIS K 5600 standard, use Mitsubishi Pencil 500g) |
| Motherboard | SBC | PPCMB-5152A-D525 |
| | CPU | Intel® Atom™ D525 1.8GHz dual core processor |
| | Chipset | Intel® ICH8M |
| | RAM | 1*1G 204-pin DDR3 SO-DIMM slot (Max.4GB) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| I/O ports and switches | | 2 x RS-232 (DB-9 connector) 1 x RS-232 or RS-422/485 (DB-9 connector) 2 x RS-422/485 (RJ-45 connector) 2 x USB 2.0 connector 2 x USB 3.0 connector VGA port (DB-15 connector) AT/ATX switch 2 x RJ-45 Gigabit LAN Reset button |
| Drive Bay | HDD Drive Bay | One 2.5" SATA HDD/SSD bay |
| | SSD | CF Type II socket |
| | CD-ROM Drive Bay | N/A |
| Physical | Front Panel Construction | Aluminum |
| | Chassis Construction | Heavy duty steel (SECC) |
| | Mounting | Panel, Wall, Rack, Stand and Arm (VESA 100 mm x 100 mm) |
| | Front Panel Color | Silver, Paint Tone PMS 8401C |
| | Dimensions (WxHxD) (mm) | 422 x 331 x 80 |
| | Cut Out Dimensions (WxH) (mm) | 390 x 290 |
| Net / Gross Weight | | 6.5 kg/ 7.0 kg |
| Expansion Slot | | Two PCI slots or one PCI slot plus one PCIe x1 slot |
| System Cooling | | Burglar-proof internal USB 2.0 port |
| Environment | Operating Temperature | Fanless |
| | Storage Temperature | -20°C ~ 50°C |
| | Vibration | -30°C ~ 80°C |
| | Shock | MIL-STD-810F 514.5C-2 (with CF card or SSD) |
| | IP level | Half-sine wave shock 3G; 11ms; 3 shocks per axis |
| | Safety & EMC | Front Panel IP 64 |
| Power | Power Adapter | CE / FCC |
| | Power Requirement | DSP 90W power adapter (FSP090-D2BA1) |
| | Consumption | Input: 100VAC~240VAC, 50/60Hz |
| | | Output: 19V DC |
| | | 9~36V DC Jack |
| | | 50W without add-on card |

Ordering Information

| | Part No. | Description |
|-------------------|---------------------------------|---|
| 15" | PPC-5152-D525-E/R/1G-R10 | 15" 400 cd/m ² XGA Fanless Panel PC, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, Silver Color, touch screen, ANSI C1D2 SKU |
| Riser Card | PPCDB-PCI/PCI-E-R10 | Riser Card for PCI and PCIe Interface for PPC-5152-D525-E, R10 |
| | PPCDB-PCI-R10 | Riser Card for PCI*2 Interface for PPC-5152-D525-E, R10 |

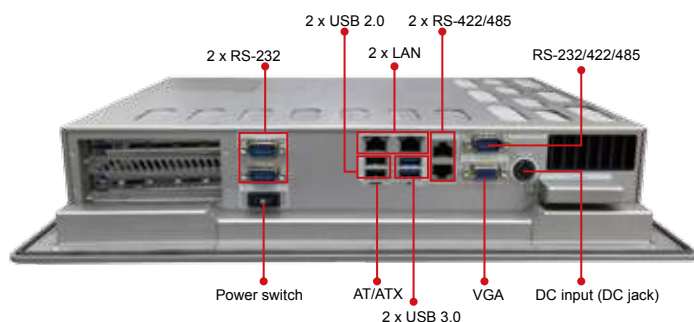
Options

| Item | P/N | Description |
|----------------------------------|--|-------------|
| Panel Mounting Kit | PK-170M | |
| Wall Mounting Kit | WK-190MS-R10 | |
| ARM | ARM-11-RS/ARM-31-RS | |
| Stand | STAND-A19-RS/STAND-A21-R10/ STAND-210-R11 | |
| OS: Win XPE (4GB CF Card) | PPCCF-5152-D525-XPE-4G-R10 | |
| OS: Win 7 Embedded (4GB CF Card) | PPCCF-5152-D525-WES7E-4G-R10 | |

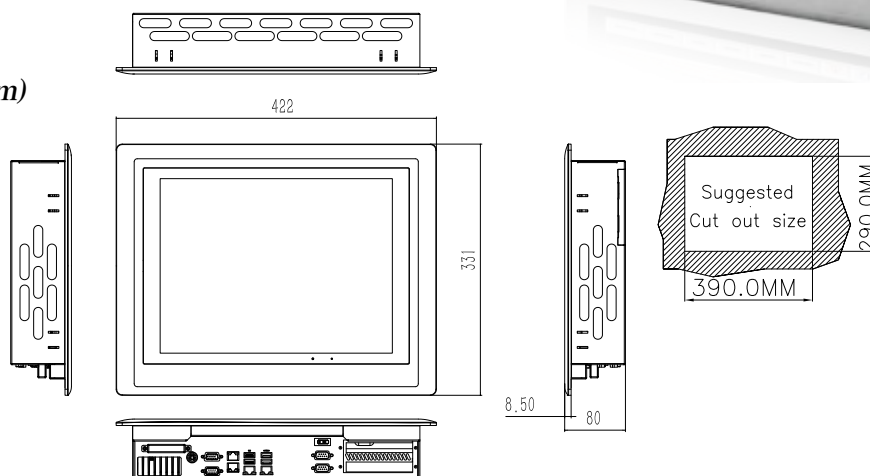
(*it doesn't include video/audio capture card's driver)

Packing List

| Item | P/N | Q'ty | Description |
|--------------------------------|---------------------|------|---|
| Utility CD | 7B000-000732-RS | 1 | Drivers and user manual |
| One Key Recovery CD | | 1 | |
| VESA Mounting Screw | 44033-040062-RS | 4 | M4*6 for securing stand bracket |
| Chassis Screw | 44013-030041-RS | 4 | M3*4 chassis screw for backup |
| Capture Card Screw | 44003-030062-RS | 4 | M3*5 capture card screw for backup |
| VESA Fastener | 19Z00-000024-RS | 6 | |
| HDD Screw | 44043-030051-RS | 4 | |
| Pluggable DC-in Terminal Block | 33101-000897-RS | 1 | |
| RJ-45 to DB9 COM port Cable | 32005-000700-100-RS | 2 | |
| Touch pen | 43125-0002C0-00-RS | 1 | |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 | |
| Power Adapter | 63040-010090-100-RS | 1 | FSP090-DIEBN2;90~264VAC input; 90W;19VDC output |
| Power Cord | 32702-000401-100-RS | 1 | 1500 mm, European Standard |
| Power Transfer Cord | 32702-000300-100-RS | 1 | |



PPC-5152-D525-E Dimensions (Unit: mm)



15" Industrial Panel PC

PPC-5152-D525

15" Flat-bezel Industrial Panel PC


Combo Gigabit LAN
(SFP Fiber/RJ-45)

Features

- Robust aluminum with IP 64 compliant front bezel design
- 5-wire resistive touch
- Intel® Atom™ D525 1.8GHz dual-core with fan-less design
- 15" 400 nits LED backlight panel with 1024 x 768 resolution
- Two USB 3.0, two USB 2.0 and five COM ports available
- Flexible expansion interface (two PCI slots or one PCI slot + one PCIe slot)
- Optional 4-channel video/audio capture card and Wi-Fi (802.11 b/g/n) available
- Built-in 1.3-megapixel webcam with autofocus, auto enhancement and auto white balance
- Dual combo (10/100/1000BASE-T(X) or 1000 baseSFP slot) gigabit LAN ports



Specifications

| Model Name | | PPC-5152-D525 |
|------------------------|-------------------------------|---|
| Display | LCD Size | 15" |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m²) | 400 |
| | Contrast Ratio | 500:1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.1095(H) x 0.1095(V) |
| | Viewing Angle (V/H) | 160° / 140° |
| | Backlight MTBF (hrs) | 50000 |
| | Touch Screen | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | DMC 9000 |
| Motherboard | SBC | PPCMB-5152A-D525 |
| | CPU | Intel® Atom™ D525 1.8GHz dual core processor |
| | Chipset | Intel® ICH8M |
| | RAM | One 204-pin DDR3 SO-DIMM slot (Max.4GB) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| I/O ports and switches | Audio Codec | Realtek ALC888 audio codec |
| | | 2 x RS-232 (DB-9 connector) |
| | | 1 x RS-232 or RS-422/485 (DB-9 connector) |
| | | 2 x RS-422/485 (RJ-45 connector) |
| | | 2 x USB 2.0 connector |
| | | VGA port (DB-15 connector) |
| | | 2 x Audio jacks (line-out, Mic) |
| | | 2 x USB 3.0 connector |
| | | AT/ATX switch |
| | | 2 x Combo (SFP / RJ-45) Gigabit LAN |
| Drive Bay | HDD Drive Bay | 2.5" SATA HDD bay |
| | SSD | CF Type II socket |
| | CD-ROM Drive Bay | N/A |
| Physical | Front Panel Construction | Aluminum |
| | Chassis Construction | Heavy duty steel (SECC) |
| | Mounting | Panel, Wall, Rack, Stand and Arm (VESA 100 mm x 100 mm) |
| | Front Panel Color | Silver, Paint Tone PMS 8401C |
| | Dimensions (WxHxD) (mm) | 422 x 331 x 80 |
| | Cut Out Dimensions (WxH) (mm) | 390 x 290 |
| Expansion Slot | Net / Gross Weight | 6.5 kg/ 8.8 kg |
| | | Two PCI slots or one PCI slot plus one PCIe x1 slot |
| System Cooling | | Burglar-proof internal USB 2.0 port |
| Environment | | Fanless |
| | Operating Temperature | -20°C ~ 50°C |
| | Storage Temperature | -20°C ~ 70°C |
| | Vibration | MIL-STD-810F 514.5C-2 (with CF card or SSD) |
| | Shock | Half-sine wave shock 3G; 11ms; 3 shocks per axis |
| | IP level | Front Panel IP 64 |
| Power | Safety & EMC | CE / FCC |
| | Power Adapter | 90W power adapter |
| | | Input: 100VAC~240VAC, 50/60Hz |
| | | Output: 19V DC |
| | Power Requirement | 9~36V DC Jack |
| | | 9~36V Terminal Block |
| Consumption | | 50W without add-on card |

Ordering Information

| | Part No. | Description |
|--------------------------|-----------------------------|--|
| Converter card (HPE-2S1) | PPC-5152-D525/R/1G/2P-R11 | 15" 400 cd/m ² XGA Fanless Panel PC with two PCI expansion slots, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11 |
| Converter card (HPE-2S2) | PPC-5152-D525/R/1G/1P1E-R11 | 15" 400 cd/m ² XGA Fanless Panel PC with one PCI and one PCIe x1 expansion slot, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11 |

Options

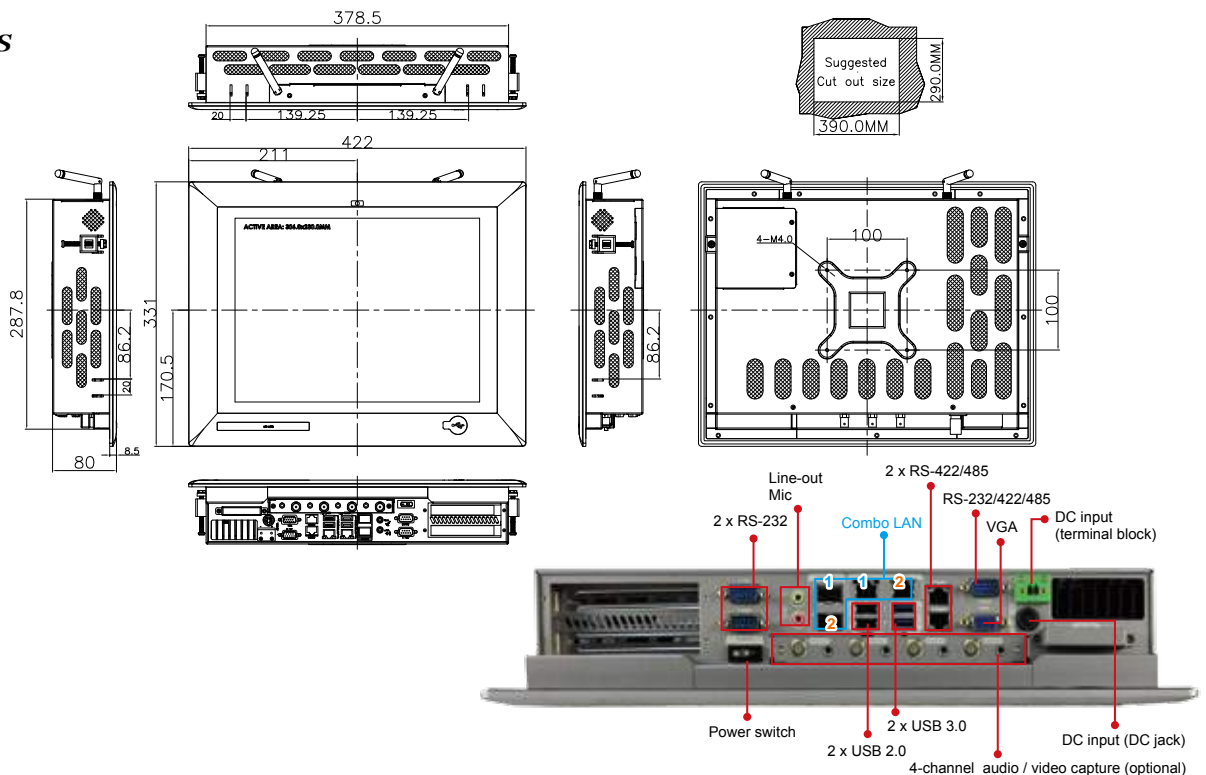
| Item | P/N | Description |
|----------------------------------|--|--|
| Panel Mounting Kit | PK-170M | |
| Wall Mounting Kit | WK-190MS-R10 | |
| ARM | ARM-11-RS/ARM-31-RS | |
| Stand | STAND-A19-RS/STAND-A21-R10/ STAND-210-R11 | |
| Wi-Fi Module Kit | PPC-WL-KIT02-R11 | Wi-Fi module with RF cable and antennas, 2T2R, 802.11 b/g/n.(Telec certified) |
| Capture Card Kit | PPC-CP-KIT01-R10 | 4-channel video/audio capture card with input panel and cable, PCIe Mini interface, NTSC/PAL |
| Gigabit Ethernet SFP Module | SFP1G-SX/-I | 1Gbps SFP optical transceiver, multi-mode / 550m, 850nm (0 ~ 70°C) /industrial grade (-20 ~ 85°C) |
| | SFP1G-MLX/-I | 1Gbps SFP optical transceiver, multi-mode / 2Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C) |
| | SFP1G-LX10/-I | 1Gbps SFP optical transceiver, single-mode / 10Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C) |
| | SFP1G-XD70/-I | 1Gbps SFP optical transceiver, single-mode / 50Km, 1550nm (0°C ~ 70°C) / industrial grade (-40°C ~ 85°C) |
| Fiber Cord | FPC-LCLC-MM3M | Optical connector LC/LC, multi-mode, diameter 62.5/125 μm, length 3m. |
| | FPC-LCLC-SS3M | Optical connector LC/LC, single-mode, diameter 9/125 μm, length 3m. |
| OS: Win XPE (4GB CF Card) | PPCCF-5152-D525-XPE-4G-R10 | |
| OS: Win 7 Embedded (4GB CF Card) | PPCCF-5152-D525-WES7E-4G-R10 | |

(*it doesn't include video/audio capture card's driver)

Packing List

| Item | P/N | Q'ty | Description |
|--------------------------------|---------------------|------|---|
| Utility CD | 7B000-000732-RS | 1 | Drivers and user manual |
| One Key Recovery CD | | 1 | |
| VESA Mounting Screw | 44033-040062-RS | 4 | M4*6 for securing stand bracket |
| Chassis Screw | 44013-030041-RS | 4 | M3*4 chassis screw for backup |
| Capture Card Screw | 44003-030062-RS | 4 | M3*5 capture card screw for backup |
| VESA Fastener | 19200-000024-RS | 6 | |
| HDD Screw | 44043-030051-RS | 4 | |
| Pluggable DC-in Terminal Block | 33101-000897-RS | 1 | |
| RJ-45 to DB9 COM port Cable | 32005-000700-100-RS | 2 | |
| Touch pen | 43125-0002C0-00-RS | 1 | |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 | |
| Power Adapter | 63040-010090-020-RS | 1 | FSP090-D2BA1;90~264VAC input;90W;19VDC output |
| Power Cord | 32702-000401-100-RS | 1 | 1500 mm, European Standard |
| Power Transfer Cord | 32702-000300-100-RS | 1 | |

Dimensions (Unit: mm)



15" Industrial Panel PC

PPC-5150A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor



Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x 1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)



Specifications

| Model | | PPC-5150A-H61 |
|------------------------|---------------------------------|---|
| Display | LCD Size | 15 " |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 400 |
| | Contrast Ratio | 700 : 1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) |
| | Viewing Angle (V/H) | 140°/160° |
| Touch | Backlight MTBF (hrs) | 50000 |
| | Touch Screen | Resistive Type 5-Wire with RS-232 interface |
| Motherboard | Touch Controller | DMC 9000 |
| | SBC | POS-H61 |
| | CPU | 2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor |
| | Chipset | Intel® H61 |
| | RAM | Two 204-pin DDR3 SO-DIMM slots (Max. 16G) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| I/O Ports and Switches | Audio Codec | Realtek ALC662 audio codec |
| | | 4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA/IDE HDD bay with anti-shock |
| | SSD | CF Type II, mSATA (SATA2 Signal) |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI slot or 1 x PCIe slot, |
| | | 1 x PCIe Mini card |
| Physical | Front Panel Construction | Aluminum |
| | Chassis Construction | Heavy-duty Steel |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 410 x 309 x 110.5 |
| | Cut Out Dimensions (WxH) (mm) | 387 x 286 |
| | Net/Gross Weight | 7 Kg / 11 Kg |
| Environment | Operating Temperature | -20°C ~ 60°C |
| | Storage Temperature | -30°C ~ 70°C |
| | System Cooling | Active with Fan |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak |
| | Shock | 10G acceleration part to part (11ms) |
| | IP Rating | Front IP66 Compliant |
| Power Supply | AC Input | AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A |
| | DC Input | DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A |

Ordering Information

| Part No. | Description |
|----------------------------|---|
| Intel® H61 Platform | PPC-5150A-H61-P/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5150AD-H61-P/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5150A-H61-i3/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5150AD-H61-i3/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5150A-H61-i5/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5150AD-H61-i5/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| Riser Card | PCIR-01H-R10 1-Slot PCI riser card |
| | PCIER-101H-R10 1-Slot PCIe x 1 riser card |

Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|--|
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | 19Z00-000024-RS x8 |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |
| User's Manual CD-ROM | | |

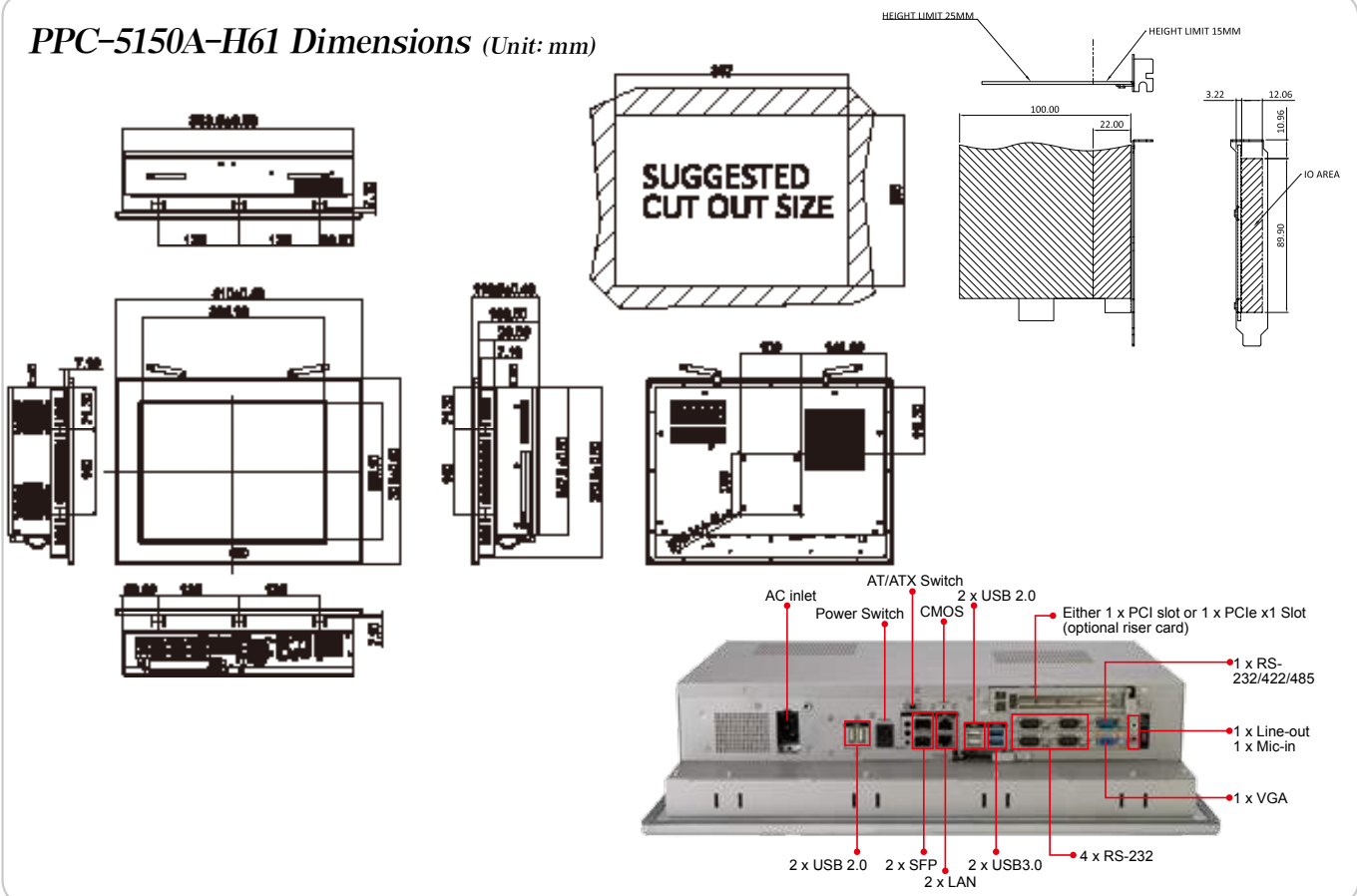
IQ Mounting Options

| Item | Part No. |
|----------------|---------------|
| Rack Mount Kit | RK-150MS-R10 |
| ARM | ARM-31-RS |
| STAND | STAND-210-R11 |

Options

| Part Number | Description |
|--------------------|---|
| PPC-WL-KIT02-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61 (Telec certified) |
| 73400-AD7760H01-RS | Slim type SATA DVD-ROM |

PPC-5150A-H61 Dimensions (Unit: mm)



17" Industrial Panel PC

PPC-5170A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor



Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5170A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)



Specifications

| Model | | PPC-5170A-H61 |
|------------------------|-------------------------------|---|
| Display | LCD Size | 17" |
| | Max Resolution | 1280(W) x 1024(H) |
| | Brightness (cd/m²) | 350 |
| | Contrast Ratio | 800 : 1 |
| | LCD Color | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) |
| | Viewing Angle (V/H) | 170°/ 160° |
| | Backlight MTBF (hrs) | 50000 |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | DMC 9000 |
| Motherboard | SBC | POS-H61 |
| | CPU | 2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor |
| | Chipset | Intel® H61 |
| | RAM | Two 204-pin DDR3 SO-DIMM slots (Max. 16GB) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| | Audio Codec | Realtek ALC662 audio codec |
| I/O Ports and Switches | | 4 x RS-232 COM Port 1 x Audio (Line-out, MIC-in) |
| | | 1 x RS-232/422/485 Port 2 x SFP Fiber LAN |
| | | 2 x RJ-45 for LAN Port 1 x Power Switch |
| | | 4 x USB 2.0, 2 x USB 3.0 on rear 1 x AT / ATX Switch |
| | | 1 x VGA Port 1 x PCI/PCIe Slot |
| | | |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II, mSATA (SATA2 Signal) |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI slot or 1 x PCIe slot |
| | | 1 x PCIe Mini card |
| Physical | Front Panel Construction | Aluminum |
| | Chassis Construction | Heavy-duty Steel |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 452 x 356 x 115 |
| | Cut Out Dimensions (WxH) (mm) | 426 x 331 |
| | Net /Gross Weight | 8 Kg / 12 Kg |
| | IP Rating | Front IP66 Compliant |
| Environment | Operating Temperature | -20°C ~ 60°C |
| | Storage Temperature | -30°C ~ 70°C |
| | System Cooling | Active with Fan |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak |
| | Shock | 10G acceleration part to part (11ms) |
| Power Supply | AC Input | AC Input ATX power supply |
| | | - P/N: 63000-ACEA622A166-RS |
| | | - 220W power supply |
| | | - Input: 90VAC~264VAC, 50/60Hz |
| | DC Input | - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A |
| | | DC Input ATX power supply |
| | | - P/N: ACE-4520C-RS |
| | | - 200W power supply |
| | | - Input: 24 VDC(18~36 VDC) |
| | | - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A |
| | | |
| | | |

Ordering Information

| Part No. | Description |
|----------------------------|---|
| Intel® H61 Platform | PPC-5170A-H61-P/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5170AD-H61-P/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5170A-H61-i3/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5170AD-H61-i3/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5170A-H61-i5/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5170AD-H61-i5/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| Riser Card | PCIR-01H-R10 1-Slot PCI riser card |
| | PCIER-101H-R10 1-Slot PCIe x1 riser card |

Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|---|
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER , L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | 19Z00-000024-RS x10 |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |
| User's Manual CD-ROM | | |

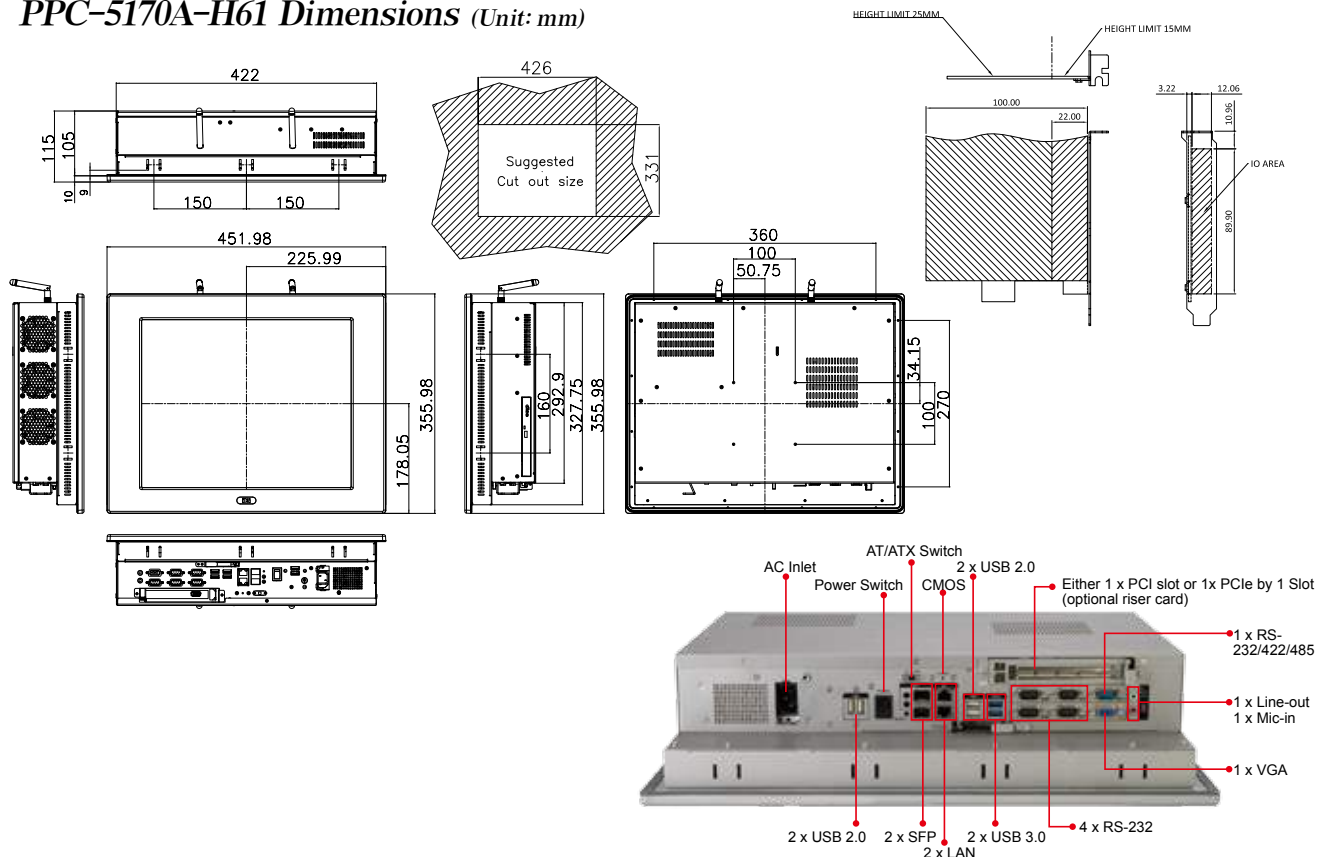
IQ Mounting Options

| Item | Part No. |
|----------------|---------------|
| Rack Mount Kit | RK-170MS-R10 |
| ARM | ARM-31-RS |
| STAND | STAND-210-R11 |

Options

| Part Number | Description |
|--------------------|---|
| 19Z00-000112-RS | IDE CD-ROM Installation Kit (W/O IDE cable) |
| 41019-0393C0-00-RS | IDE HDD Bracket |
| 32200-000037-RS | 25cm HDD IDE Cable |
| PPC-WL-KIT02-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61 |
| 73400-AD7760H01-RS | Slim type SATA DVD-ROM |

PPC-5170A-H61 Dimensions (Unit: mm)



19" Industrial Panel PC

PPC-5190A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor



Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5190A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)



Specifications

| Model | | PPC-5190A-H61 | |
|------------------------|-------------------------------|---|------------------------------|
| Display | LCD Size | 19" | |
| | Max Resolution | 1280(W) x 1024(H) | |
| | Brightness (cd/m²) | 350 | |
| | Contrast Ratio | 1000 : 1 | |
| | LCD Color | 16.7M | |
| | Pixel Pitch (mm) (HxV) | 0.294(H) x 0.294(V) | |
| | Viewing Angle (V/H) | 160°/ 170° | |
| | Backlight MTBF (hrs) | 50,000 | |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | |
| | Touch Controller | DMC 9000 | |
| Motherboard | SBC | POS-H61 | |
| | CPU | 2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor | |
| | Chipset | Intel® H61 | |
| | RAM | Two 204-pin DDR3 SO-DIMM slots (Max. 16GB) | |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | |
| | Audio Codec | Realtek ALC662 audio codec | |
| I/O Ports and Switches | | 4 x RS-232 COM Port | 1 x Audio (Line-out, MIC-in) |
| | | 1 x RS-232/422/485 Port | 2 x SFP Fiber LAN |
| | | 2 x RJ-45 for LAN Port | 1 x Power Switch |
| | | 4 x USB 2.0, 2 x USB 3.0 on rear | 1 x AT / ATX Switch |
| | | 1 x VGA Port | 1 x PCI/PCIe Slot |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shook | |
| | SSD | CF Type II, mSATA (SATA2 Signal) | |
| | CD-ROM Driver Bay | Slim Type CD-ROM Bay | |
| Expansion Slot | | Either 1 x PCI slot or 1 x PCIe slot | |
| | | 1 x PCIe Mini card | |
| Physical | Front Panel Contruccion | Aluminum | |
| | Chassis Construction | Heavy-duty Steel | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 482 x 399 x 115 | |
| | Cut Out Dimensions (WxH) (mm) | 450 x 363 | |
| | Net / Gross Weight | 12.6 Kg / 18.2 Kg | |
| Environment | Operating Temperature | -10°C ~ 50°C | |
| | Storage Temperature | -20°C ~ 60°C | |
| | System Cooling | Active with Fan | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| | IP Rating | Front IP66 Compliant | |
| Power Supply | AC Input | AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A | |
| | DC Input | DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Outout(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A | |

Ordering Information

| Part No. | Description | |
|----------------------------|-------------------------|--|
| Intel® H61 Platform | PPC-5190A-H61-P/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5190AD-H61-P/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5190A-H61-i3/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5190AD-H61-i3/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | PPC-5190A-H61-i5/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | PPC-5190AD-H61-i5/R-R10 | 19" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS |
| Riser Card | PCIR-01H-R10 | 1-Slot PCI riser card |
| | PCIER-101H-R10 | 1-Slot PCIe x 1 riser card |

PCIER-101H-R10



PCIe x4 slot with PCIe x1 signal riser card

PCIR-01H-R10



One-slot PCI riser card

Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|--|
| User's Manual CD-ROM | | |
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | 19Z00-000024-RS x10 |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |

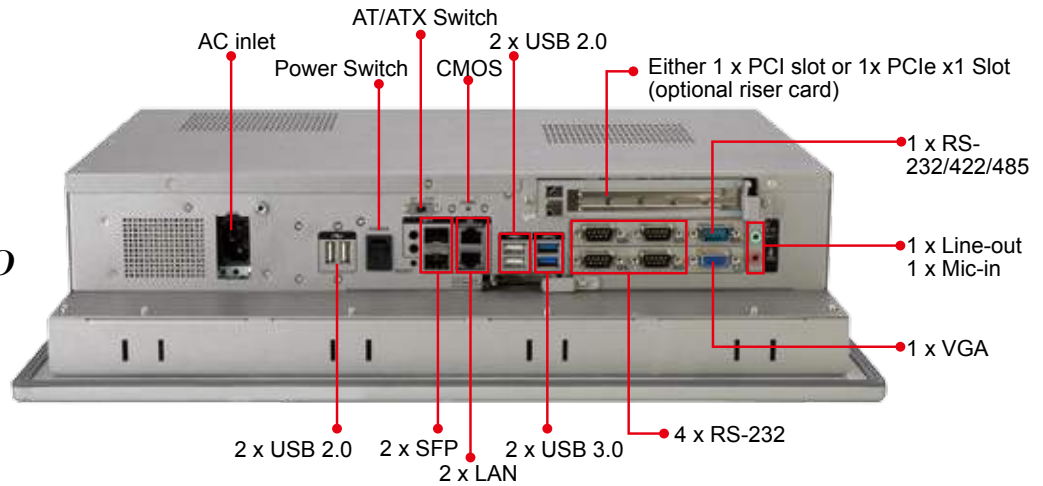
IQ Mounting Options

| Item | Part No. |
|----------------|---------------|
| Rack Mount Kit | RK-190MS-R10 |
| ARM | ARM-31-RS |
| STAND | STAND-210-R11 |

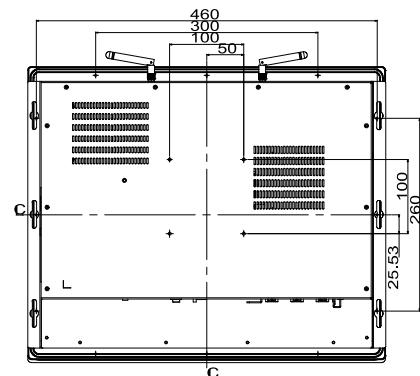
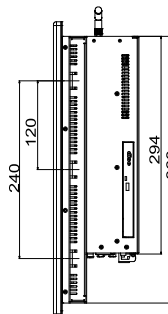
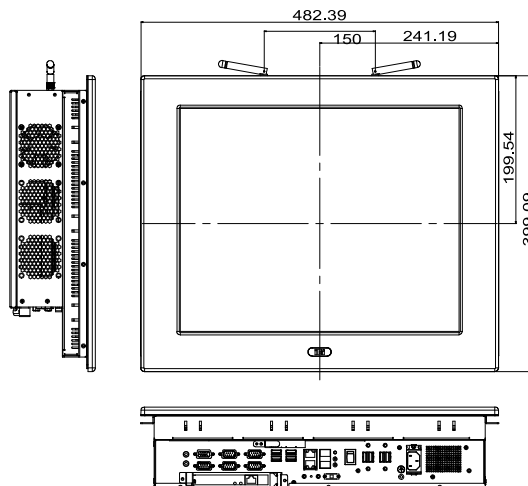
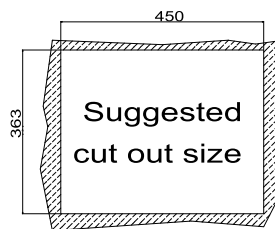
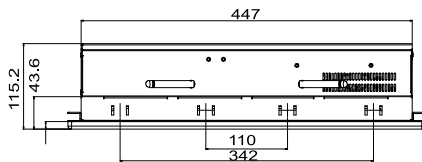
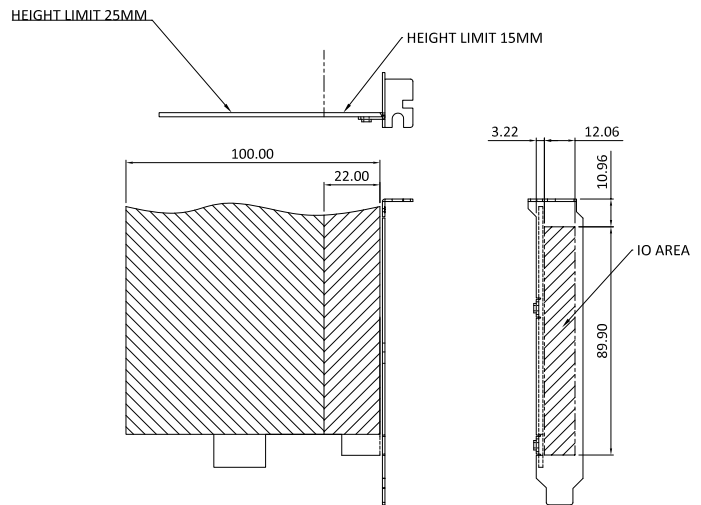
Options

| Part Number | Description |
|--------------------|---|
| PPC-WL-KIT03-R10 | Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5190A-H61(Telec certified) |
| 73400-AD7760H01-RS | Slim type SATA DVD-ROM |

PPC-5190A-H61 Fully Integrated I/O



PPC-5190A-H61 Dimensions (Unit: mm)



WIDS Series Selection Guide



| LCD Size | | 15" | 17" |
|------------------------|---------------------------------|--|---|
| Model | | WIDS-515A-H61 | WIDS-517A-H61 |
| Display | LCD Size | 15 " | 17 " |
| | Max Resolution | 1024(W) x 768(H) | 1280(W) x 1024(H) |
| | Brightness (cd/m ²) | 400 | 350 |
| | Contrast Ratio | 700:1 | 800 : 1 |
| | LCD Color | 16.2M | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | 0.264(H) x 0.264(V) |
| | Viewing Angle (V/H) | 140°/ 160° | 170°/ 160° |
| | Backlight MTBF (hrs) | 50000 | 50000 |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | DMC 9000 | DMC 9000 |
| Motherboard | CPU | 2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor | 2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor |
| | Chipset | Intel® H61 | Intel® H61 |
| | RAM | 2 x 204-pin DDR3 SO-DIMM slot (max. 16GB) | 2 x 204-pin DDR3 SO-DIMM slot (max. 16GB) |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 |
| | Audio Codec | Realtek ALC662 HD audio codec | Realtek ALC662 audio codec |
| I/O Ports and Switches | | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe expansion slot | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe expansion slot |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shook | 1 x 2.5" SATA HDD bay with anti-shook |
| | SSD | CF Type II, mSATA | CF Type II, mSATA |
| | CD-ROM Driver Bay | Slim Type CD-ROM Bay | Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI slot or 1 x PCIe slot | Either 1 x PCI slot or 1 x PCIe slot |
| | | 1 x PCIe Mini card | 1 x PCIe Mini card |
| System Cooling | | Active with Fan | Active with Fan |
| Environment | Operating Temperature | -20°C ~ 60°C | -20°C ~ 60°C |
| | Storage Temperature | -30°C ~ 70°C | -30°C ~ 70°C |

WIDS Industrial Panel PC

WIDS-515A-H61

15" IP65 Heavy Industrial Panel PC with Wi-Fi

WIDS-517A-H61

17" IP65 Heavy Industrial Panel PC with Wi-Fi



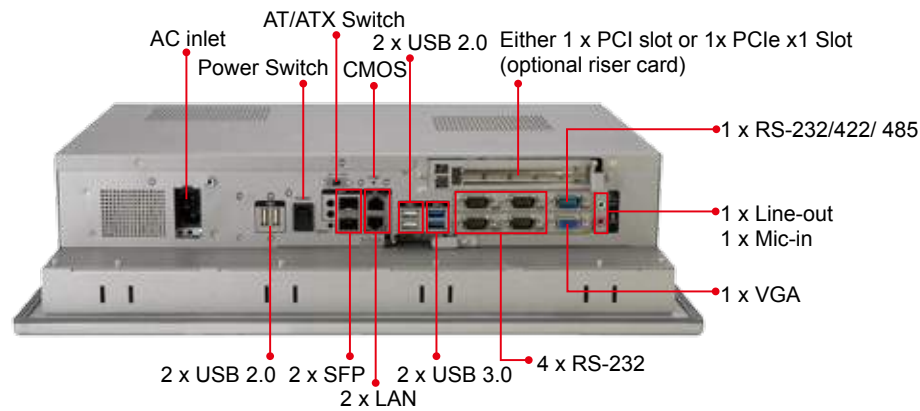
- Intel® H61 Express Chipset with 2nd/3rd Generation Intel® Core™, Pentium® and Celeron® processor
- Built-in PCIe Mini 802.11b/g/n wireless module for panel mount installation
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- IP 65 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)



Specifications

| Model | | WIDS-515A | WIDS-517A |
|------------------------|---|--|--|
| Display | LCD Size | 15" | 17" |
| | Max Resolution | 1024(W) x 768(H) | 1280(W) x 1024(H) |
| | Brightness (cd/m ²) | 400 | 350 |
| | Contrast Ratio | 700:1 | 800:1 |
| | LCD Color | 16.2M | 16.7M |
| | Pixel Pitch (mm) | 0.297 x 0.297 | 0.264 x 0.264 |
| | Viewing Angle (V-H) | 140°/160° | 170°/160° |
| | Backlight MTBF (hrs) | 50,000 | |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | |
| | Touch Controller | DMC 9000 | |
| Motherboard | SBC Model | POS-H61 | |
| | CPU | 2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor | |
| | Chipset | Intel® H61 | |
| | RAM | 2 x 204-pin DDR3 SO-DIMM slot (max. 16GB) | |
| | Ethernet | Realtek RTL8111E PCIe GbE controller supporting ASF 2.0 | |
| | Audio Codec | Realtek ALC662 HD audio codec | |
| I/O Ports and Switches | | 4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB 3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot | 4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB 3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot |
| Driver Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shook | |
| | SSD | CF Type II, mSATA (SATA2 Signal) | |
| | CD-ROM Driver Bay | Slim Type CD-ROM Bay | |
| Wireless | | IEEE 802.11b/g/n 2T2R mode WLAN via internal PCIe Mini card interface | |
| Extension Slot | | Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe Mini card | |
| Physical | Front Panel Construction | Aluminum | |
| | Construction Chassis | Heavy-duty Steel | |
| | Mounting Front Panel Color | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm Silver (Pantone 8001C) | |
| | Dimension (WxHxD) (mm) | 410 x 329 x 123 | 452 x 376 x 123 |
| | Net Gross Weight | 7 Kg / 11 Kg | 8 Kg / 12 Kg |
| | Operating Temperature (°C) (Ambient with air flow) | -20°C ~ 60°C | -20°C ~ 60°C |
| | Environment Storage Temperature (°C) | -30°C ~ 70°C | -30°C ~ 70°C |
| | Humidity | 10% to 95% (non-condensing) | 10% to 95% (non-condensing) |
| | Vibration | 5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak | |
| | Shoock | 10G acceleration part to part (11ms) | |
| Power Supply | ATX AC-Input | AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A | |
| | | AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A | |
| | DC Input | DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A | |
| | | DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A | |

IO Interface



Ordering Information

| Part No. | Description |
|------------|--|
| 15" | WIDS-515A-H61-P/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-515AD-H61-P/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | WIDS-515A-H61-i3/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-515AD-H61-i3/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | WIDS-515A-H61-i5/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-515AD-H61-i5/R-R10 15" 400 cd/m ² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| 17" | WIDS-517A-H61-P/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-517AD-H61-P/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | WIDS-517A-H61-i3/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-517AD-H61-i3/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| | WIDS-517A-H61-i5/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | WIDS-517AD-H61-i5/R-R10 17" 350 cd/m ² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| Riser Card | PCIR-01H-R10 1-Slot PCI riser card |
| | PCIER-101H-R10 1-Slot PCIe x1 riser card |

Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|---------------------------------|
| SATA CD-ROM Cable | 32803-000300-100-RS | SATA 7+6 P TO SATA 7P /4P POWER |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM |
| Panel Mount Kit | 19Z00-000024-RS | 19Z00-000024-RS x10 |
| Wall Mount Kit | 41020-016102-00-RS | WALL MOUNT BRACKET |
| | 41014-057602-00-RS | ULTRA SET PLATE |
| Touch Pen | 43125-0002C0-00-RS | |
| User's Manual CD-ROM | IEI-7B000-000543-RS | For WIDS-51xA-G41 |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |

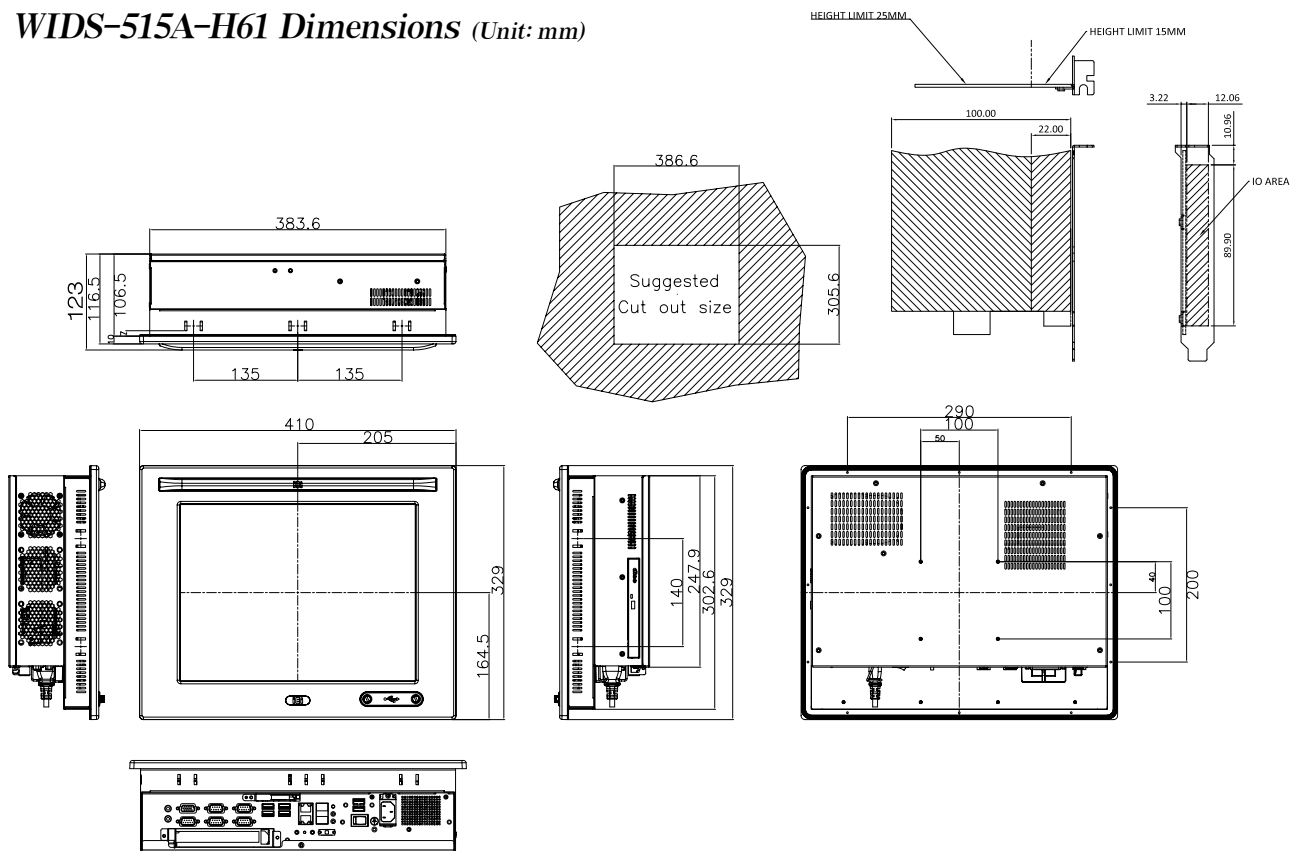
IQ Mounting Options

| Item | WIDS-515A | WIDS-517A |
|-----------------|-----------|---------------|
| Panel Mount Kit | | PK-170M |
| Wall Mount Kit | | WK-190MS-R10 |
| Stand | | STAND-210-R11 |
| ARM | | ARM-31-RS |

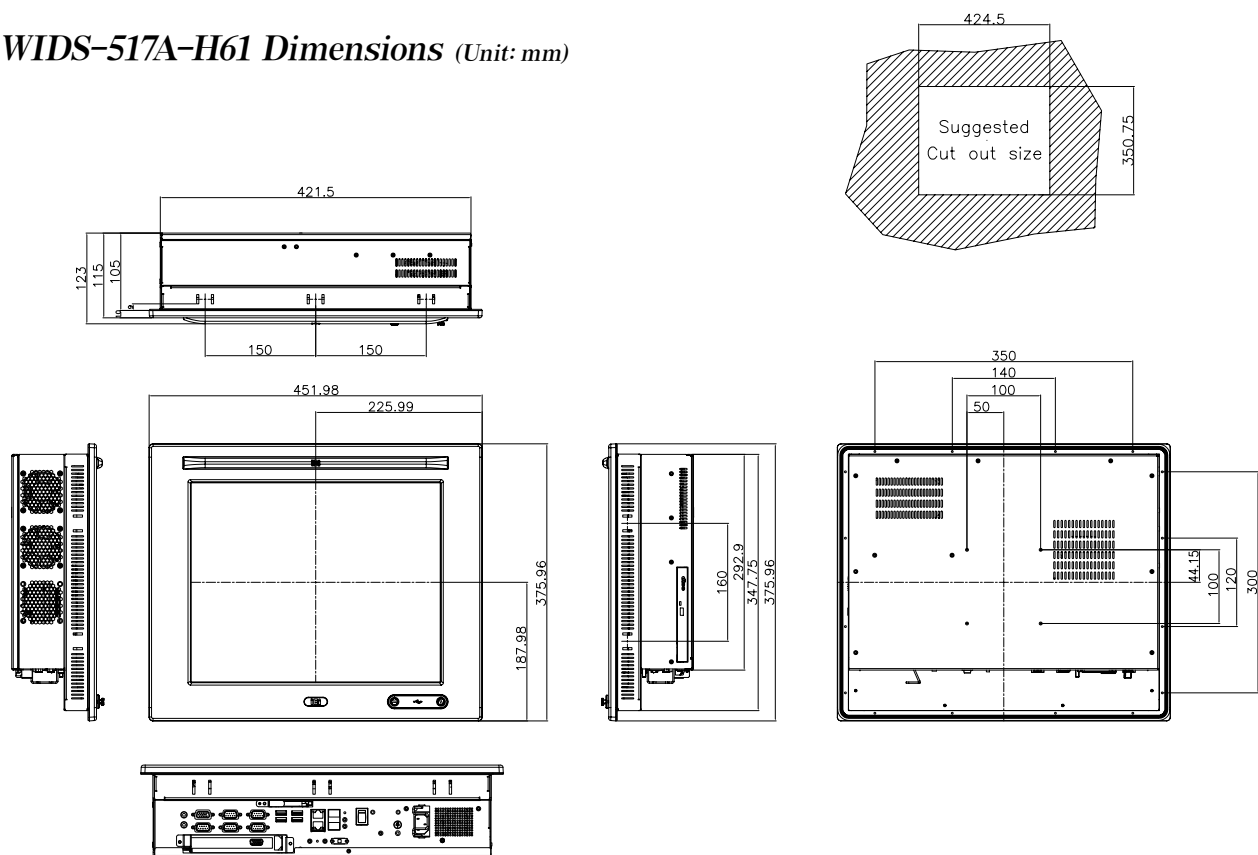
Options

| Part Number | Description |
|--------------------|------------------------|
| 73400-AD7760H01-RS | Slim type SATA DVD-ROM |

WIDS-515A-H61 Dimensions (Unit: mm)



WIDS-517A-H61 Dimensions (Unit: mm)



Fully Ruggedized PPC Selection Guide



| Model | | S24A-QM87 | S19A-QM87 | S12A(SR)-N270 | UPC-V312-D525 | | UPC-V315-QM77 |
|------------------------|---------------------------------|--|--------------------------|---|---|--|---|
| Display | LCD Size | 24" | 19" | 12.1" | 12.1" | | 15" |
| | Max Resolution | 1920 x 1080 | 1280 x 1024 | 1024 x 768 | 1024 x 768 | | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 300 | 300 | 500 (1300) | 600 | | 400 |
| | Contrast Ratio | 5000:1 | 2000:1 | 500 : 1 (600 : 1) | 700 : 1 | | 700:1 |
| | LCD Color | 16.7M | 16.7M | 262K | 16.2M | | 16.2M |
| | Pixel Pitch (mm) (HxV) | 276.75 x 276.75 | 0.294 x 0.294 | 0.240 (H) x 0.240 (V) | 0.240 (H) x 0.240 (V) | | 0.297(H) x 0.297(V) |
| | Viewing Angle (V/H) | 178° / 178° | 178° / 178° | 120°/100° (160°/140°) | 150° / 130° | | 160°/ 140° |
| | Backlight MTBF (hrs) | 50000 | 50000 | 50000 (100000) | 50000 | | 50000 |
| Touch | Touch Screen | Projected Capacitive Touch with USB interface | | Resistive Type 5-Wire with RS-232 interface | Resistive Type 5-Wire with RS-232 interface | | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | EETI EXC3000 | EETI EXC3000 | PENMOUNT 6000 | DMC 9000 | | DMC 9000 |
| Motherboard | CPU | Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor | | Intel® Atom™ N270 1.6GHz CPU | Intel® Atom™ D525 1.8GHz dual core processor | | Intel® Core™ i3-3217UE Processor Intel® Core™ i5-3517UE Processor |
| | Chipset | Intel® QM87 | Intel® QM87 | Intel® 945GSE + ICH7M | Intel® ICH8M | | Mobile Intel® QM77 Express Chipset |
| | RAM | Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16G | | Supports one 400/533MHz DDR2 SO-DIMM (2GB Max.) | On-board 1GB DDR3 SO-DIMM (System Max. 1GB) | | Built in one 2 GB DDR3 memory (System Max. 8GB; on board Max. 4GB; socket Max. 4GB) |
| | Ethernet | GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller | | Realtek RTL8111CP PCIe GbE controller | Realtek RTL8111CP PCIe GbE controller | | Intel® WG82579LM GbE PHY |
| | Audio Codec | N/A | N/A | Realtek ALC892 audio codec | Realtek ALC888 audio codec | | Realtek ALC892 HD audio codec |
| I/O Ports and Switches | | 3 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x PS2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5KV isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection) 1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved) 1 x Isolated 9V ~ 36V DC 3-pin terminal block 1 x Power button | | 1 x 5-pin M12 connector for power adapter 1 x 8-pin M12 connector for two USB 1 x 5-pin M12 connector for CAN-bus and Audio line out 1 x 8-pin M12 connector for UART RS-232/422/485 1 x 8-pin M12 connector for UART RS-232 1 x 8-pin M12 connector for GbE LAN | RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line out, Mic) VGA port (DB-15 connector) DC-IN 1 (terminal block) / DC-IN 2 (DC Jack) Reset button AT/ATX switch | | 3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out, MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch |
| Drive Bay | HDD Driver Bay | N/A | N/A | 1 x 2.5" SATA HDD Bay with anti-shock | N/A | | 1 x 2.5" SATA SSD bay |
| | SSD | 2 x SSD Bay & 1 x CFast | 2 x SSD Bay & 1 x CFast | CF Type II | CF Type II | | mSATA (SATA2) |
| Expansion Slot | | 2 x PCIe Mini Card | 2 x PCIe Mini Card | Built-in 802.11b/g/n Wireless LAN Module (internal PCIe Mini interface) | PCIe Mini slot for Wi-Fi | | 1 x PCIe Mini Card |
| System Cooling | | Fanless | Fanless | Fanless | Fanless | | Fanless |
| Environment | Operating Temperature | -15°C to 55°C (5% to 95% RH) | | -10°C ~50°C | -20°C~60°C | | -20°C ~60°C |
| | Storage Temperature | -20°C to 60°C | -20°C to 60°C | -20°C~60°C | -40°C~85°C | | -30°C ~70°C |
| IP Rating | | Front IP 66 / Rear IP 22 | Front IP 66 / Rear IP 22 | IP 67 | Full IP 65 | | Full IP 65 |

Marine Panel PC Series

New


The maritime field faces critical environmental challenges, making reliable and rugged systems essential. IEI provides maritime professionals with marine-grade computers and panel PCs that use leading technologies and reliable designs which are perfect for applications on the dock, on an open deck, or in the control room or bridge.

Features

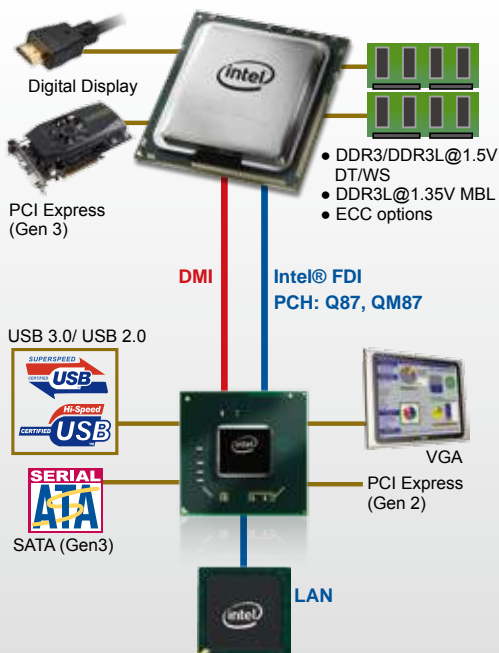
- 19" and 24" Fanless Panel PC with 4th Generation Intel® Core™ i5 Dual-core Processor
- -15°C ~ +55°C Wide Temperature and IP66 Protection with Flat-bezel Projected Capacitive Touchscreen
- Excellent Visual Performance
 - Three independent displays
 - Full OSD function configuration
 - 0%~100% full range dimming
 - 178°/178° wide viewing angles
 - Optical bonding improves visibility under bright light (optional)
- Isolation Protection
 - RS-232/422/485 isolated serial ports
 - Isolated 18V ~ 36V DC input
 - 2 x Isolated CAN-bus 2.0B
- iRIS Remote Management Module



Intel® Core™ i5 High Performance Computing Power in a Fanless Design

IEI's high performance marine solutions are built with the powerful Intel® Core™ i5 CPU on fanless system architecture. Whether your application is general marine systems management, monitoring or conning systems, radar systems, or ECDIS navigation, IEI's marine computers will give you the most reliable use and best returns over the longest term.

4th Gen Intel® Core™ Processor ("Haswell")

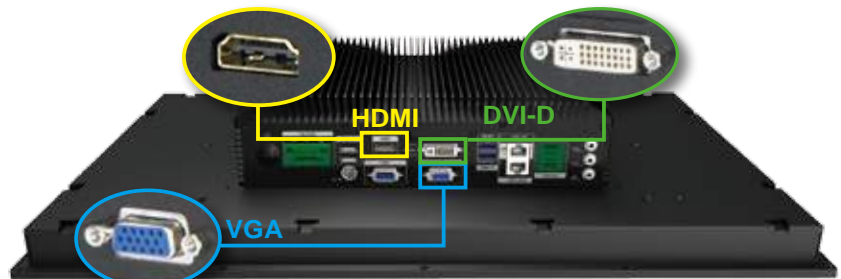


■ New "Tock" Architecture on 22nm Process

- Improved CPU performance with Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor
- Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB

■ Intel® Processor Graphics with DX11.1 & OCL1.2

- Three independent displays: choose three among HDMI, DVI, LVDS and VGA



■ Reliable Fanless System

With IEI's fanless solutions, your vessels can avoid the bothersome of replacement of fan, increasing safety and efficiency for the crew and the entire ship.



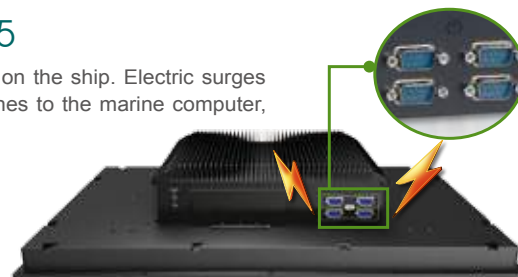
Multiple Isolated Ports for Comprehensive Protection against Electrical Surges

Ground loop and electric surges are common in the marine applications of electronic products, due to the dense placement of devices. These stray electrical signals can cause equipment damage or malfunction.

■ Isolated 2.5 KV protection on the RS-232/422/485

IEI Marine Computer is protected from any stray electrical signals from other device on the ship. Electric surges that were generated on other electronic devices which often passed through serial lines to the marine computer, causing serious malfunction. Severe damage to the computer could occur.

■ Isolated 18~36V DC power 2250VDC Input to Output Basic Insulation



■ Isolated 2.5 KV 2 independent CAN 2.0B channels

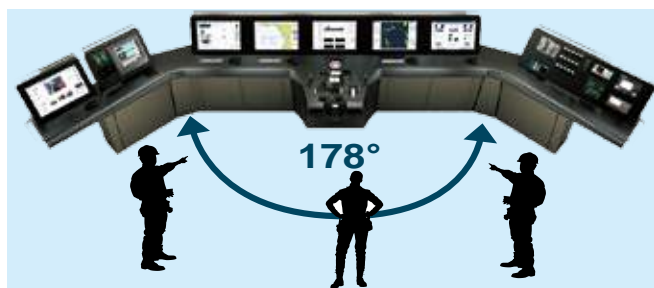
CAN 2.0B is kind of marine electronics data network for communication between marine electronic devices such as chart plotters, navigation instruments, GPS receivers, etc.



Breakthrough Display and Touch Technologies

■ AMVA Ultra-high Contrast Ratio & Ultra-wide Viewing Angle Technology

Wide LCD (89°/89°/89°/89°) viewing angles allow marine users to conveniently view displayed images from many different angles, allowing for more flexible placement when arranging and installing ship display stations. IEI LCD panels allow viewing from 89° across four directions. This guarantees that displays will be clearly visible from nearly all angles with no noticeable color washout. Wide viewing angles give greater flexibility of usage, and translate into greater crew mobility and efficiency.



| | AMVA | Conventional |
|--|-----------|--------------|
| Comparison of low color washout inside angle images using AMVA and conventional MVA technologies | | |
| | | |
| | S19A | S24A |
| Panel Type | PMVA | AMVA |
| Wide Viewing Angles | 178°/178° | 178°/178° |
| High Contrast | 2000:1 | 5000:1 |

■ 7H Anti-scratch

Since the top surface layer of a PCAP sensor is typically glass, there is no concern about cleaning or corrosion.

| | S19A | S24A |
|-------------------|----------------|----------------|
| Hardness | 7H | 7H |
| Surface Treatment | 92% AR coating | 92% AR coating |

■ 10-Point Touch Mode (S19A-QM87 only)

10-point touch functionality delivers fast response times. Freely rotate, drag, and flick the map on the screen. 10-point touch can simplify the interface and provide an intuitive user experience that goes beyond the typical "button replacement" in most simple touch interfaces.



Specifications

| Model | | S19A-QM87 | S24A-QM87 |
|----------------------------|---------------------------|--|--|
| TFT LCD | LCD Size | 19" | 24" |
| | Panel Type | PMVA | AMVA |
| | Resolution (Aspect Ratio) | 1280 x 1024 (5:4) | 1920 x 1080 (16:9) |
| | Contrast Ratio | 2000:1 | 5000:1 |
| | Brightness (cd/m²) | 300 | 300 |
| | Viewing Angles | 178°/178° | 178°/178° |
| | MTBF (hrs) | 50000 | |
| Touchscreen & Controller | | Projected capacitive touchscreen / EETI EXC3000 | |
| System | Chipset | Intel® QM87 | |
| | CPU | Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor | |
| | RAM | Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB | |
| I/O Interface | | 2 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x PS2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5KV isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection) | 1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved) 1 x Isolated 18V ~ 36V DC 3-pin terminal block 1 x Power button |
| Ethernet Controller | | GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller | |
| Expansion | | 2 x Full-size PCIe Mini card slot, 1 x iRIS-2400 slot (iRIS remote management module) | |
| Sensor | | Ambient light sensor (0% ~ 100%) | |
| OSD | | Menu, Brightness down, Brightness up, LCD on/off by cap-sensor | |
| Storage | | 2 x 2.5" SSD bay with RAID 0/1 function 1 x Accessible CFast socket | |
| LED Indicator | | Power (power on: green; power off: orange)/storage (red, blinking)/IPMI (blue) | |
| Power Requirement | | Isolated 9V ~ 36V DC, screw-type 3-pin terminal block | |
| Operating Temperature | | -15°C to 55°C (5% to 95% RH) | |
| Storage Temperature | | -20°C to 60°C | |
| Thermal Design | | Fanless | |
| Watchdog Timer | | Supports 1~255 sec. system reset | |
| Certifications | | EMC: CE, FCC Safety: DNV, IEC 60945 4th, IACS-E10 IP rating: IP66 compliant front panel /IP22 compliant rear cover | |
| Housing | | Front aluminum sheet metal (Black C) | |
| Cut-out Dimensions (L x W) | | 442 mm x 373 mm | 576 mm x 358 mm |
| Dimensions (L x W x H) | | 463 mm x 394 mm x 113 mm | 592 mm x 374 mm x 113 mm |
| Net Weight | | 10 kg | 15 kg |
| Mounting | | Panel mounting | |
| Vibration and Shock | | IEC 60945 and DNV 2.4 compliant | |

Ordering Information

| P/N | Description |
|-------------------------|--|
| S19A-QM87i-i5/PC/4G-R10 | 19" 300cd/m² SXGA marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM,projected capacitive touch screen, isolated 18-36V DC, iRIS-2400 supported, R10 |
| S24A-QM87i-i5/PC/4G-R10 | 24" 300cd/m² FHD marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM,projected capacitive touch screen, isolated 18-36V DC, iRIS-2400 supported, R10 |

Packing List

| Item | Q'ty | Description |
|------------|------|-------------------------|
| Utility CD | 1 | Drivers and User Manual |

Options

| Item | Part No. | Description |
|-------------------|-----------------|---|
| Panel Mount Kit | PK-S19A-R10 | for S19A-QM87 |
| | PK-S24A-R10 | for S24A-QM87 |
| iRIS Module | iRIS-2400-R10 | IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface |
| Desktop Stand | STAND-S24A-R10 | for S19A-QM87 & S24A-QM87 |
| Ceiling Mount Kit | CEILMT-S24A-R10 | for S19A-QM87 & S24A-QM87 |



STAND-S24A-R10



CEILMT-S24A-R10

Diagram illustrating the rear view of the RS-232 module, showing various ports and connectors labeled with blue lines:

- Power Switch
- 18V-36V DC
- 2 x USB 2.0
- HDMI
- CAN-bus 2.0B
- GbE LAN 1
- Line-in
- Line-out
- Mic-in
- COM 1: RS-232
- 2 x USB 3.0
- VGA
- 1 x PS/2
- Combo RJ-45: GbE LAN 2 /IPMI
- DVI-D
- CFAST Slot



Ambient Light Sensor



Dimensions

The technical drawings provide the following dimensions for the 15.6 inch LCD monitor:

- Top View:**
 - Overall width: 438.8
 - Inner width: 290
 - Bottom bezel width: 360
- Front View:**
 - Overall height: 384
 - Viewable area height: 195.45
 - Overall width: 463
- Side View:**
 - Thickness: 8
 - Mounting bracket width: 38
 - Mounting bracket depth: 75
 - Mounting bracket height: 369.8
- Bottom View:**
 - Overall width: 360
- Back View:**
 - Overall width: 328
- Suggested Cut Out Size:**
 - Height: 372.80
 - Width: 441.8

[illegible]

SBOX-100-QM87

New


- Fanless Marine Computer with Intel® Core™ i5-4400E 2.7GHz processor
- Support IPMI 2.0 via IEI iRIS solution

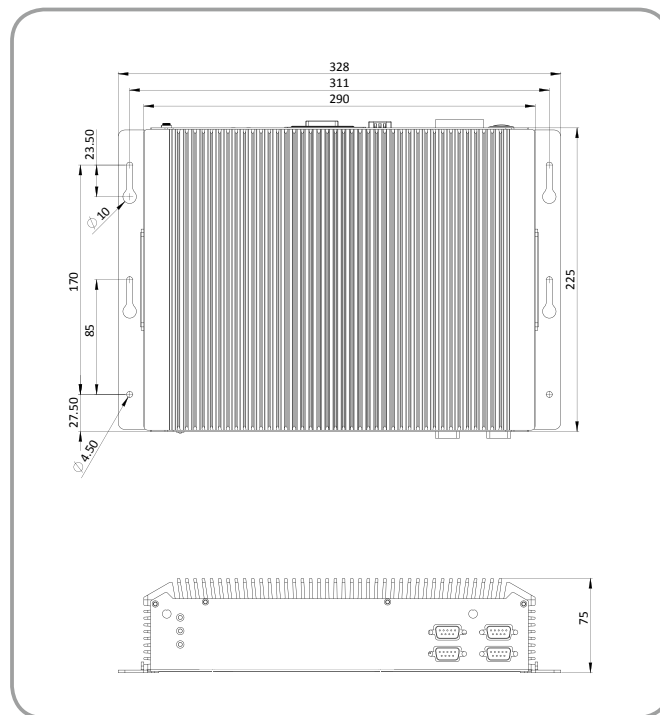
Features

- ◆ Fanless Marine Computer with 4th Generation Intel® Core™ i5 Dual-core Processor
- ◆ -15°C ~ +55°C Wide Temperature
- ◆ Isolation Protection
 - 4 x RS-232/422/485 isolated serial ports
 - Isolated 9 V~36V DC input
 - 2 x Isolated CAN-bus 2.0B
- ◆ 2 x 2.5" SSD bay with RAID 0/1 function
- ◆ Support IEI iRIS-2400 (IPMI 2.0 compliant)



Specifications

| Model Name | | SBOX-100-QM87 |
|-----------------------|--|---|
| System | Chipset | Intel® QM87 |
| | CPU | Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz Processor |
| | RAM | Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB (pre-install with 4GB DDR3) |
| Storage | | 2 x 2.5" SATA III 6GB/s SSD bay with RAID 0/1 function, 1x external screwed type CFast socket |
| I/O Interface | 1 x isolated 9 V~36 V DC 3-pin terminal block | |
| | 2 x CAN-BUS 2.0B, 3-pin terminal block (2.5KV isolation protection) | |
| | 1 x PS2 | |
| | 1 x VGA | |
| | 1 x DVI-D | |
| | 1 x HDMI | |
| | 1 x DB-9 RS-232 (non-isolated), 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) | |
| | 2 x RJ45 GbE LAN with teaming support (LAN2 supports iRIS function) (2KV isolation protection) | |
| | 2 x USB 2.0, 2 x USB3.0 | |
| | 1 x Mic-in | |
| Ethernet Controller | 1 x Line-out, 1 x Line-in | |
| | GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT | |
| Expansion | 2 x Full-size PCIe Mini card slot | |
| | 1 x iRIS-2400 slot (iRIS remote management module) | |
| LED Indicator | | POWER (Power on: Green; Power off: Orange)/ Storage (Red, blinking)/IPMI (Blue) |
| Power Requirement | | Isolated 9 V-36V DC, screw-type 3-pin terminal block |
| Operating Temperature | | -15°C to 55°C (5% to 95% RH) |
| Storage Temperature | | -20°C to 60°C |
| Thermal Design | | Fanless |
| Watch Dog Timer | | supporting 1-255 levels for time interval system reset |
| Approvals | EMC: CE, FCC | |
| | Safety: DVN, IEC 60945 4th, IACS-E10 compliant | |
| Dimensions (LxWxH mm) | | 463 x 394 x 108 |
| Net Weight (Kgs) | | 8 |
| Mounting | | Wall Mounting |
| Vibration | | IEC 60945 and DNV 2.4 compliant |



Ordering information

| Part No. | Description |
|--------------------------|---|
| SBOX-100-QM87i-i5/4G-R10 | Fanless marine computer with Intel® Mobile Core™ i5-4400E 2.7GHz Processor ,DDR3 4GB, iRIS-2400 supported, isolated 9~36V DC, R10 |

Packing list

| Item | Qty |
|---------------------|-----|
| Wall mount kit | 1 |
| Utility CD | 1 |
| One Key Recovery CD | 1 |

S12A

12.1" Full IP 67 Panel PC

Full IP 67
Up to 1 meter of
submersion

Features

- 12.1" 1300 nits super high brightness LED available
- IP 67 (NEMA 6) fully-enclosed aluminum die cast enclosure and IP 67 waterproof lockable I/O
- Fanless system integrated with Intel® Atom™ N270 1.6G processor for ultra low voltage
- Supports one 2.0 GB (max.) 400/533 MHz DDR2 SO-DIMM
- Built-in internal Wi-Fi antenna supports 802.11b/g/n high standard
- CAN-bus interface for automotive applications
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing (Advanced Deep Dimming to Black for sunlight readable model)
- Standard VESA 75/100 compliance

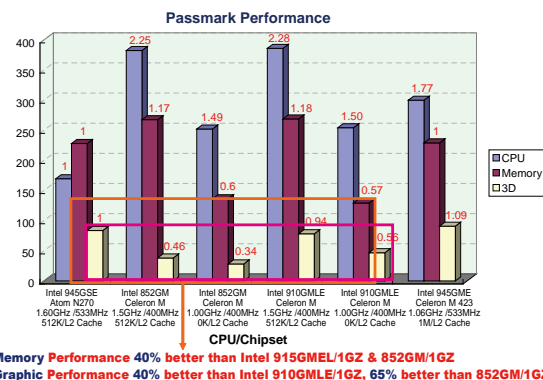
COMPUTEX TAIPEI 2009
BEST CHOICE

Rugged Panel PC with Fanless Intel® Atom™ Processor

The fanless intelligent display computer, S12A, uses a 45 nm Intel® Atom™ processor with up to 1.6 GHz frequency and can be used in harsh and safety-critical applications in transport, avionics, engineering or industrial automation.

Better graphics performance is excellent for kiosk, self-service terminal, and digital signage applications.

Evaluating 3D mark performance with different generation CPU and chipset combination, Intel® Atom™ processor is the best solution for low power consumption and better graphics performance choice.



Sunlight Readable

■ Super High Brightness

S12ASR (Sunlight Readable Model) has greatly improved luminance through edge lighting to achieve super high brightness (up to 1000 cd/m²).

■ Low Reflection through AR (Anti-Reflection) Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. S12ASR sunlight readable model offers special AR (anti-reflection) surface treatment to prevent reflection, which ensures excellent visibility in daylight conditions.




Super High Brightness: 1000 nits
High Contrast: 700:1
Wide Viewing Angle: 60/60 (R/L) 45/75 (U/D)

IP 67 Fully-Enclosed Design

The S12A is front sealed and tested in the certified house chamber under UL's Witnessed Test Data Program (TDP). IEI follows IP 67 standard testing procedures. This full IP 67 touch monitor provides full IP 67 protection including connectors, cables and screen.


[IP 67] Dust-Tight

First Digit The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

| Level | | Effective Against |
|-------|---|---|
| 6 |  | No ingress of dust; complete protection against contact |

[IP 67] Temporary immersion under water 1m

Second Digit Protection of the equipment inside the enclosure against harmful ingress of water

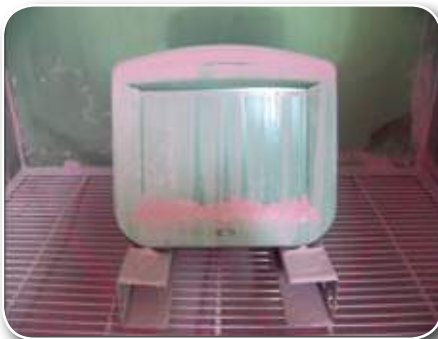
| Level | | Effective Against |
|-------|---|---|
| 7 |  | Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1m of submersion) |

Sealing enclosure with all sides of IP 67 !



■ IP6X Test

• Test for protection against dust



■ IPX7 Test



• Test for protection against water

Protected against the effects of temporary immersion between 15 cm and 1m. Duration of test is 30 minutes



• Air Flow Test

Air pressure measurement is used as the IP 67 test method, the air flow tester is capable of detecting leaks in product and evaluates the pass/fail status of the watertight system.

Uninterrupted Wireless Connection

The S12A series features high speed Wi-Fi IEEE 802.n protocol which builds on previous 802 standards by adding multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve system performance.



27 times faster data transfer rate compared to 802.11b

| Protocol | Freq. (GHz) | Thru. (Mbit/s) | Data (Mbit/s) | Range indoor (m) | Range outdoor (m) |
|----------|----------------------|----------------|------------------------|------------------|-------------------|
| 802.11 | | | | | |
| a | 5 GHz | 23 | 54 Mbit/s | ~35 | ~120 |
| b | 2.4 GHz | 4.3 | 11 Mbit/s | ~38 | ~140 |
| g | 2.4 GHz | 19 | 54 Mbit/s | ~38 | ~140 |
| n | 5 GHz and/or 2.4 GHz | 74 | 300 Mbit/s (2 streams) | ~70 | ~250 |

802.11b/g/n ready with invisible antenna



Benefits

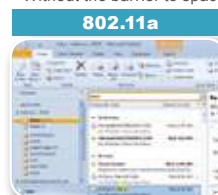
- * Half the size of Mini-PCI
- * Higher bandwidth interface
- * Rigid mechanical spec.



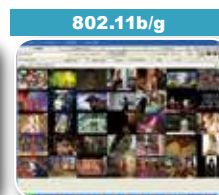
802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.

The benefits here:

- Simple configuration
- Without hinders worker movement
- Without lessens man-hour productivity
- Without additional purchase of proprietary cables for specific devices
- Without the barrier to space



Access to email, instant image and the Internet



Streaming music
Streaming video



VoIP/Gaming/NAS

Ambient Light Sensor

The S12A built-in ambient light sensor automatically detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:

- Provides comfortable viewing and prevents eye strain
- Power saving
- Extended lamp life



Day Mode:
Adjust to maximum 1000 nits
Sunlight Readable automatically

Panel brightness auto-adjustment depends on the ambient light amount to save the system power

Night Mode:
Adjust to acceptable brightness automatically in an insufficient light ambient

CAN-bus Automotive Applications

The S12A is equipped with automotive applied CAN-bus interface. The Control Area Network (CAN) is a serial bus system, originally developed by Bosch for use in automobiles, and now is increasingly being used for control in industrial and automotive applications

Controller Area Network

- 1Mb/s data rate
- High reliability bus
- CAN is an open standard with many variants
- Capable of providing real-time communication.

■ CAN in cars and truck engine

- Networking controllers for engine timing, transmission, chassis and brakes.
- Networking components of chassis electronics and electronics which make the vehicle more comfortable. Examples of such multiplex applications are lighting control, air-conditioning, central locking and seat and mirror adjustment.



Other Application Fields:



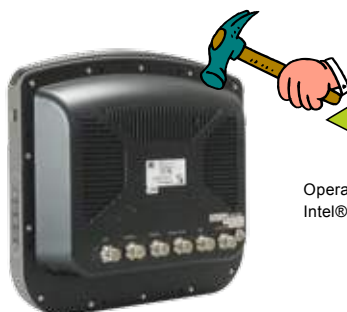
Reliable Die-Cast Aluminum Chassis

These ruggedized LCD products are designed for high reliability, shock and vibration tolerance, survival of high temperature, and corrosive environments. External materials like dust/water can be very destructive to any type of equipment over time.

■ Fanless and Completely Sealed Strong Housing

Sealed housing strictly prevents water invasion while the rugged die-cast aluminum enclosure eliminates the need for a fan as a heat dissipation device.

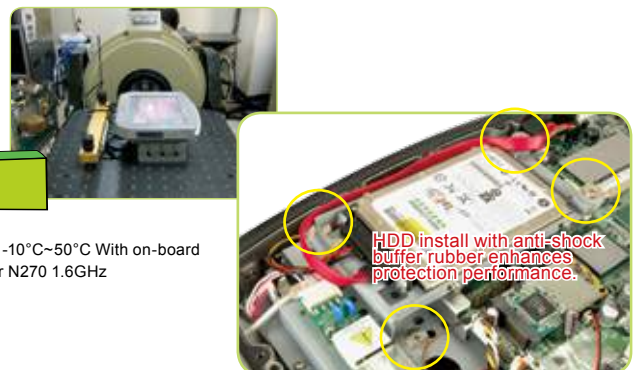
Fanless and Strong!



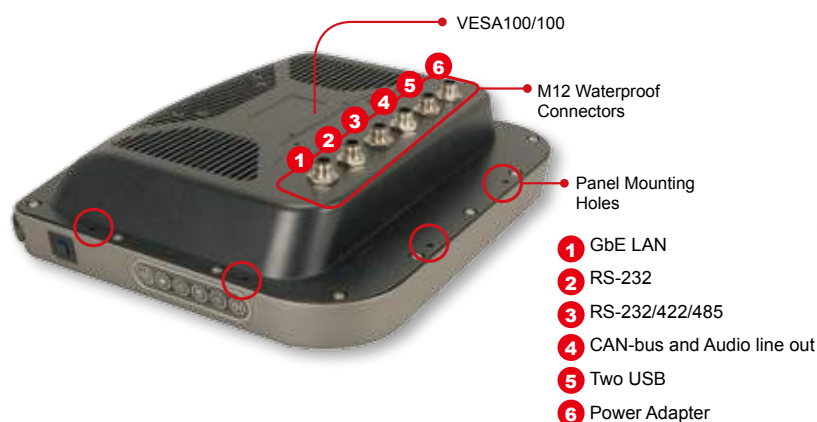
Operating Temperature: -10°C~50°C With on-board
Intel® Atom™ Processor N270 1.6GHz

■ Rigorous Shock/Vibration Test

Compliant with MIL-STD-810F shock and vibration protection, as well as offering IP 67 water and dust proof front panel protection.



Fully Integrated I/O

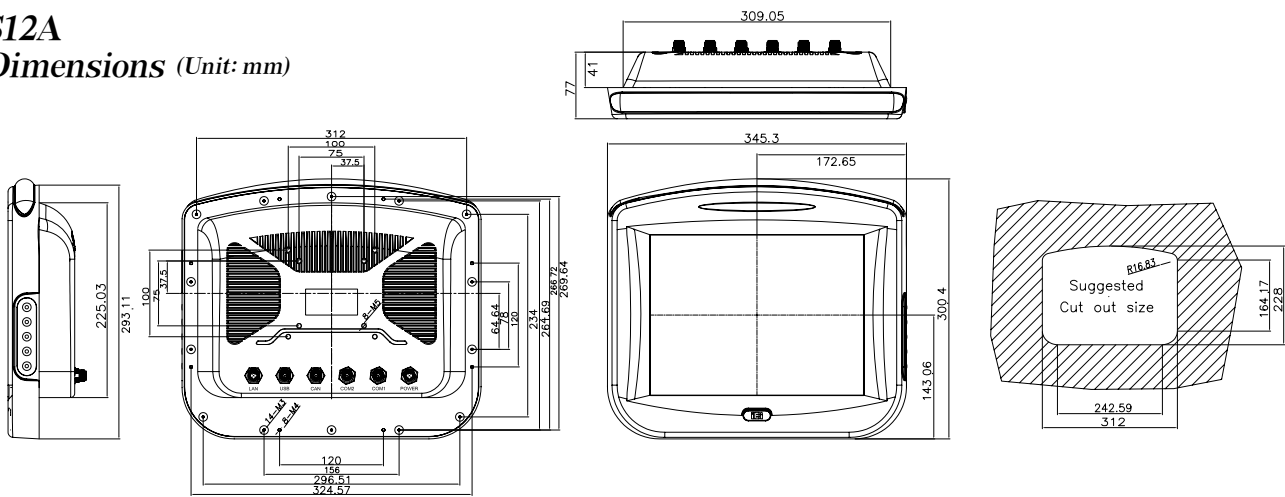


Specifications



| Model | | S12A-N270 | S12ASR-N270 |
|------------------------|---------------------------------|--|-----------------------|
| Display | LCD Size | 12.1" | |
| | Max Resolution | 1024 x 768 | |
| | Brightness (cd/m ²) | 500 | 1300 |
| | Contrast Ratio | 700:1 | 600:1 |
| | LCD Color | 16.2M | 16.7M |
| | Pixel Pitch (mm) | 0.3075 (H) x 0.3075 (V) | 0.240 (H) x 0.240 (V) |
| | Viewing Angle (H-V) | 160°/160° | 160°/140° |
| | Backlight MTBF (hrs) | 50000 | 100000 |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | |
| | Touch Controller | PENMOUNT 6000 | |
| Motherboard | CPU | Intel® Atom™ N270 1.6GHz CPU | |
| | Chipset | Intel® 945GSE + ICH7M | Intel® 945GSE + ICH7M |
| | RAM | One 400/533MHz DDR2 SO-DIMM (Max. 2GB) | |
| | Ethernet | Realtek RTL8111CP PCIe GbE controller | |
| | Audio Codec | Realtek ALC892 audio codec | |
| I/O Ports and Switches | | 1 x 5-pin M12 connector for Power Adapter | |
| | | 1 x 8-pin M12 connector for two USB | |
| | | 1 x 5-pin M12 connector for CAN-bus and Audio line out | |
| | | 1 x 8-pin M12 connector for UART RS-232/422/485 | |
| | | 1 x 8-pin M12 connector for UART RS-232 | |
| | | 1 x 8-pin M12 connector for GbE LAN | |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | CF Type II | |
| Expansion Slot | | 1 x Wireless LAN Module (802.11 b/g/n) (internal PCIe Mini card interface) Telec certified | |
| Physical | Front Panel Construction | Aluminum | |
| | Chassis Construction | Heavy-duty steel | |
| | Mounting | Panel, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8403C) | |
| | Dimensions (WxHxD) (mm) | 345.3 x 300.4 x 77 | |
| | Net/Gross Weight | 4.2 Kg / 5.3 Kg | |
| Environment | Operating Temperature (°C) | -10°C ~50°C | -10°C ~50°C |
| | Storage Temperature (°C) | -20°C ~60°C | -20°C ~60°C |
| | Vibration | 5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Optional Power Supply | | P/N: 63000-CLG60121C-RS - 60W Power Adapter - Input: 90VAC~264VAC, 50/60Hz - Output: 12VDC - M12 waterproof connector 5P | |
| Power Requirement | | 9~28VDC | |
| Front Panel Protection | | IP 67 Compliant | |
| Power Consumption | | 33W | 51W |
| Certificate | | Meets CE, FCC, DNV | |

S12A Dimensions (Unit: mm)



Ordering Information

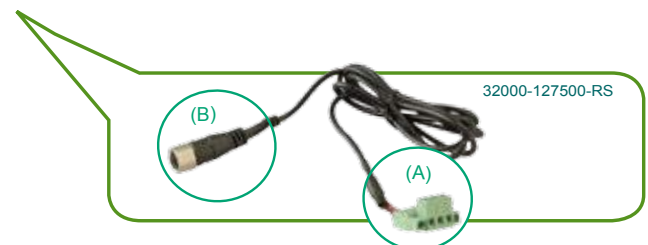
| Part No. | Description |
|---------------------|---|
| S12A/R/1/32-X-R30 | 12.1" 500 cd/m ² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 320GB SATA HDD with Windows XP Embedded operating system, R30 |
| S12A/R/1/1-C6-R30 | 12.1" 500 cd/m ² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operating system, R30 |
| S12A/R/1/4-X-R30 | 12.1" 500 cd/m ² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operating system, R30 |
| S12ASR/R/1/1-C6-R40 | 12.1" 1300 cd/m ² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operating system, R40 |
| S12ASR/R/1/4-X-R40 | 12.1" 1300 cd/m ² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operating system, R40 |
| S12ASR/R/1/32-X-R40 | 12.1" 1300 cd/m ² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 320GB SATA HDD with Windows XP Embedded operating system, R40 |

Packing List

| Item | Part No. | Description |
|-------------------------|-----------------|---|
| Panel mount screws pack | 44013-030041-RS | |
| Power cable | 32000-127500-RS | 2000mm; 16AWG; (A) terminal block connector; (B) M12 Waterproof connector |
| Utilities CD | 7B000-000087-RS | |
| Touch pen | XTR104-0002-RS | |
| One Key Recovery CD | | |

Options

| Item | Part No. |
|-------------------|-----------------------------|
| Rack mounting kit | SAILORRK-12 |
| ARM | ARM-11-RS / ARM-31-RS |
| Stand | STAND-A12-RS / STAND-100-RS |



Optional cables and adapter

| Item | Part No. |
|---------------------------------------|--------------------|
| USB cable | CB-M12USB02-R10 |
| RJ-45 LAN cable | CB-M12RJ45-R10 |
| DB-9 COM port cable | CB-M12COM-R20 |
| DB-9 CAN-bus and AUDIO line-out cable | CB-M12ACAN-R20 |
| AUDIO line-out cable | CB-M12AUDIO-R10 |
| Water-proof power adapter | 63000-CLG6012IC-RS |



USB cable
(CB-M12USB02-R10)



RJ-45 LAN cable
(CB-M12RJ45-R10)



DB-9 COM port cable
(CB-M12COM-R10)



DB-9 CAN-bus and
AUDIO line-out cable
(CB-M12ACAN-R10)



AUDIO line-out cable
(CB-M12AUDIO-R10)



Water-proof Power Adapter
(63000-CLG6012IC-RS)

UPC-V315-QM77 NM70

15" Full IP65 Aluminum Panel PC

- Intel® Ivy Bridge mobile chipset
- 15" 400 nits 1024 x 768 LCD with LED backlight
- Full IP 65 compliant die-casting aluminum chassis
- PCIe Mini card expansion
- Dual-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- ACC power support
- Dual-band 2.4/5GHz Wi-Fi 802.11a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB dongle
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-megapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- F1 ~ F10 function keys with customization options



Various Connections Options

The UPC-V315 provides different kinds of communication interfaces, such as LAN/ WLAN/3G/GPS/ Bluetooth/RFID, which maximize flexibility of system integration and ensure seamless workflow.



Connection Feasibility



Dual-Band 2.4/5GHZ Wi-Fi

Dual-band 2.4G/5G 802.11 a/b/g/n 3T3R MIMO design with up to 450 Mbps speed



Bluetooth V2.1+EDR (optional)

Connect peripheral devices with Bluetooth, such as earphone, scanner, etc.



3.75G HSUPA (optional)

Comparing to wireless network, 3.75G HSUPA has higher mobility with long-range mobile communication and no hotspot limitation. It is also able to connect to the Internet in real time.



GPS (optional)

Travel navigation, real-time locating and path tracking

Robust Mechanical Design

The UPC-V315 is fully IP65 protected with aluminum chassis and water proof rubber gaskets. It also supports wide operating temperature from -20°C to 60°C.

-20°C

60°C

note: power adapter supports operating temperature 0°C to 40°C deg. C



PCIe Mini Card Expansion

A. 3T3R Wi-Fi Module

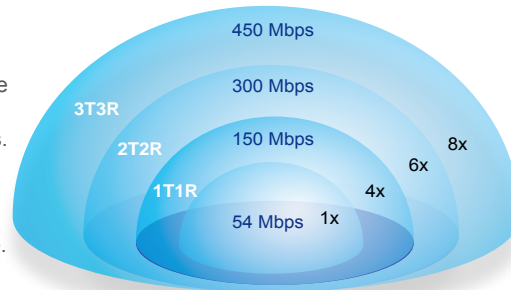
UPC-V315 supports IEEE 802.11a/b/g/n 3T3R WiFi module, enhancing the transmission speed and coverage.

T: Transmitter

The number T is absolutely relative with speed, 1T up to 150Mbps, 2T up to 300Mbps, 3T up to 450Mbps.

R: Receive

The number R is relative with receiving dead angle and distance. The higher R is, the wider the receiving range.



B. Solid State Disk mSATA

mSATA is compact, rugged, and much faster than traditional HDD, which is suitable for harsh environment.



C. 4-Channel Capture Card

The UPC-V315-QM77 supports 4-channel video capture solution via PCIe Mini card, which can easily integrate IP camera for surveillance and real-time video streaming.

QM77 Only



IVCME-C604



Forklift Management



Slaughter House Factory

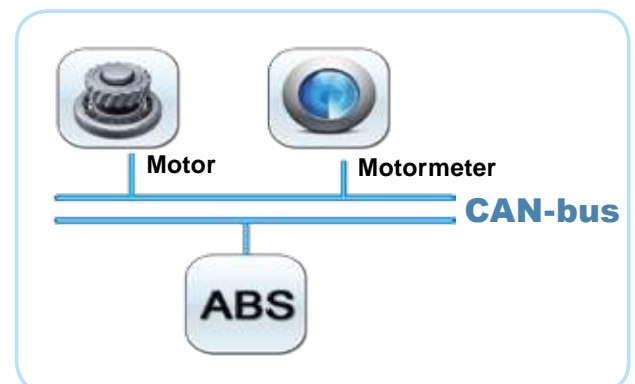


Flower Market Management

CAN-bus Interface with Isolation

The Control Area Network (CAN) is a serial bus system. The UPC-V312 on-board CAN controllers provide bus arbitration and error detection with automatic transmission repeat function. This drastically reduces the chance of data loss, ensures system reliability, and is suitable for network intelligent I/O devices such as sensors or actuators of machines or plants.

1. Isolated protection voltage 2500V/min DC protection
2. Typical transient immunity 50 kV/ms ESD protection



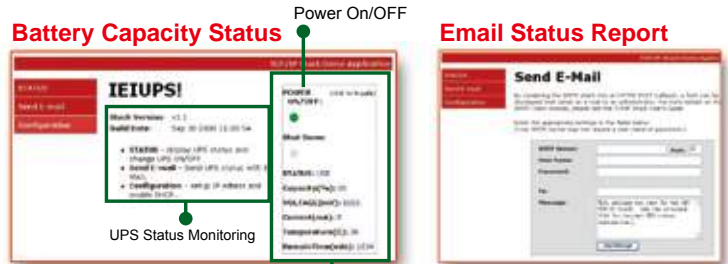
Smart UPS Back Up Power

UPC series products support IEI AUPS products to ensure stable power input.

• Network Remote Management Anywhere

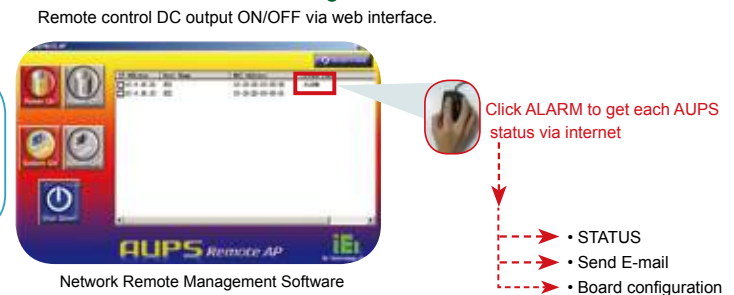


• Network Remote Management Software



• Intelligent Software Utility

The remote management software utility and application program allows users to easily get the status of the AUPS and to control the AUPS power functions from anywhere with Internet connection.



AUPS Local USB Utility Tool

Battery Monitoring Utility

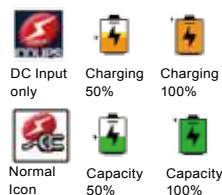
Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility allows AUPS status monitoring and configuration ability. Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event



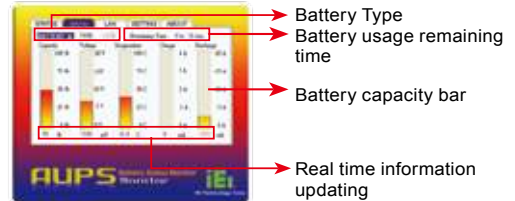
Battery Monitoring Utility Networking Remote Management

- Battery detection
- Battery capacity status
- Battery charge
- DC Input Indicator
- Battery Indicator
- Temperature warning
- Low battery alarm
- Connection port status



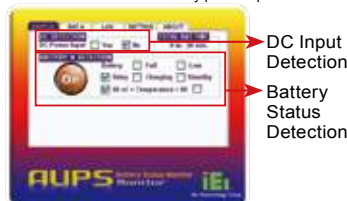
BATTERY STATUS

- BAT.A shows Battery status real time monitoring



AUPS STATUS

- STATUS shows DC / Battery power input



LAN CONFIGURATION

- LAN shows system IP Address information



ABOUT

- shows AUPS Utility information



SETTING

- SETTING shows Connection Detection port



- Auto-Scan Connection port
- System shuts down condition by battery capacity setting

Meanwhile, IEI also provides AUPS API SDK and command list for customer programming under DOS or Linux system

AUPS API Content

Inti()
AUPS Close()
WriteCommand()
ReadCommand()
Error Code Definition()

AUPS API SDK



AUPS API SDK/Content



Specifications

| Model | | UPC-V315-NM70 | UPC-V315-QM77 |
|------------------------|---------------------------------|--|---|
| Display | LCD Size | 15 " | 15 " |
| | Max Resolution | 1024(W) x 768(H) | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 400 | 400 |
| | Contrast Ratio | 700:1 | 700:1 |
| | LCD Color | 16.2M | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | 0.297(H) x 0.297(V) |
| | Viewing Angle (V/H) | 125°/ 140° | 160°/ 140° |
| | Backlight MTBF (hrs) | 50000 | 50000 |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | DMC 9000 | DMC 9000 |
| Motherboard | CPU | Intel® Celeron® Processor 847E | Intel® Celeron® 1047UE Processor Intel® Core™ i7-3517UE Processor Intel® Core™ i3-3217UE Processor |
| | Chipset | Mobile Intel® NM70 Express Chipset | Mobile Intel® QM77 Express Chipset |
| | RAM | Built-in one 2 GB DDR3 memory (System max. 8GB; on board max. 4GB; socket max. 4GB) | Built-in one 2 GB DDR3 memory (System max. 8GB; on board max. 4GB; socket max. 4GB) |
| | Ethernet | Intel® WG82579LM GbE PHY | Intel® WG82579LM GbE PHY |
| | Audio Codec | Realtek ALC892 HD audio codec | Realtek ALC892 HD audio codec |
| I/O Ports and Switches | | 3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 1 x Reset button 1 x Audio jack (Line out, MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch | 3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out, MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch |
| System | Audio | AMP 3W + 3W (Internal Speaker) | AMP 3W + 3W (Internal Speaker) |
| | Camera | 2-megapixel | 2-megapixel |
| Connectivity | Wireless | IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified | IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified |
| | Bluetooth | Bluetooth V2.0+EDR with USB interface (optional) | Bluetooth V2.0+EDR with USB interface (optional) |
| | 3G | Reserved USB connector (Optional) | Reserved USB connector (Optional) |
| | GPS | N/A | FV-W9U (Optional, internal USB header) |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA SSD bay | 1 x 2.5" SATA SSD bay |
| | SSD | mSATA (SATA2 Signal) | mSATA (SATA2 Signal) |
| Expansion Slot | | N/A | 1 x PCIe Mini Card |
| System Cooling | | Fanless | Fanless |
| Physical | Construction Material | Aluminium alloy | Aluminium alloy |
| | Mounting | VESA 100mm x100mm or 75mm x 75mm with M8 screws | VESA 100mm x100mm or 75mm x 75mm with M8 screws |
| | Front Panel Color | Orange (Pantone 15C) | Orange (Pantone 15C) |
| | Dimensions (WxHxD) (mm) | 427.19 x 330.63 x 77.06 | 427.19 x 330.63 x 77.06 |
| | Net Weight | 7.97 kg | 7.97 kg |
| Environment | Operating Temperature | -20°C ~60°C | -20°C ~60°C |
| | Storage Temperature | -30°C ~70°C | -30°C ~70°C |
| | Operating Humidity | 5% ~90%, non-condensing | 5% ~90%, non-condensing |
| | Shock | Half-sine wave shock 3G; 11ms; 3 shocks per axis | Half-sine wave shock 3G; 11ms; 3 shocks per axis |
| | Vibration | MIL-STD-810F 514.5C-1 (with SSD) | MIL-STD-810F 514.5C-1 (with SSD) |
| | IP Rating | Full IP 65 | Full IP 65 |
| Power | Adapter | 90 W; 63040-010090-020-RS (Power adapter supports operating temperature 0°C ~ 40°C) | 90 W; 63040-010090-020-RS (Power adapter supports operating temperature 0°C ~ 40°C) |
| | Requirement | Power1: 9V~36V(+/-0.3V) Power2: 10.5V~36V(+/-0.3V) | Power1: 9V~36V(+/-0.3V) Power2: 10.5V~36V(+/-0.3V) |

Ordering Information

| P/N | Description |
|---------------------------|--|
| UPC-V315-NM70-C/R/2G-R10 | 15" 400cd/m ² XGA fanless full IP65 panel PC with Mobile Intel® NM70 Express Chipset and Intel® Celeron® Processor 847E, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10 |
| UPC-V315-QM77-i3/R/2G-R10 | 15" 400cd/m ² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10 |
| UPC-V315-QM77-i7/R/2G-R10 | 15" 400cd/m ² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i7-3517UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10 |

Packing List

| Item | P/N | Q'ty |
|--------------------------------|---------------------|------|
| Utility CD | | 1 |
| One Key Recovery CD | | 1 |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 |
| RJ-45 to DB-9 COM Port Cable | 32005-000200-200-RS | 4 |
| M8 Screw | 44325-080081-RS | 8 |
| M4 Screw | 44005-040082-RS | 8 |
| Mounting Bracket | 41003-0433C2-00-RS | 2 |
| Screw Driver | 45019-001004-00 | 1 |
| Power Adapter | 63040-010065-010-RS | 1 |
| Power Cord (European Standard) | 32702-000401-100-RS | 1 |
| Power Transfer Cord | 32702-000300-100-RS | 1 |
| M8 to M4 Screw | 44300-040061-RS | 8 |

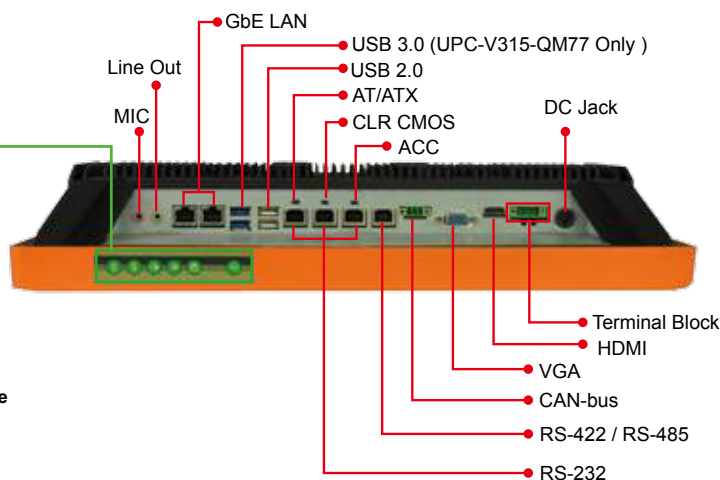
Options

| Item | P/N |
|------------------------------|-----------------------------------|
| ARM | ARM-31-RS |
| Wall Mounting Kit | AFLWK-19B |
| Stand | STAND-C19-R10/STAND-100/STAND-210 |
| GPS Module Kit | UPC-GPS-KIT01-R10 |
| EM RFID Kit | UPC-EM-RFID-KIT01-R10 |
| Mifare RFID Kit | UPC-MF-RFID-KIT01-R11 |
| OS: Win XPE (CD-ROM) | UPC-V315-XPE-R10 |
| OS: Win 7 Embedded (DVD-ROM) | UPC-V315-W7E-R10 |

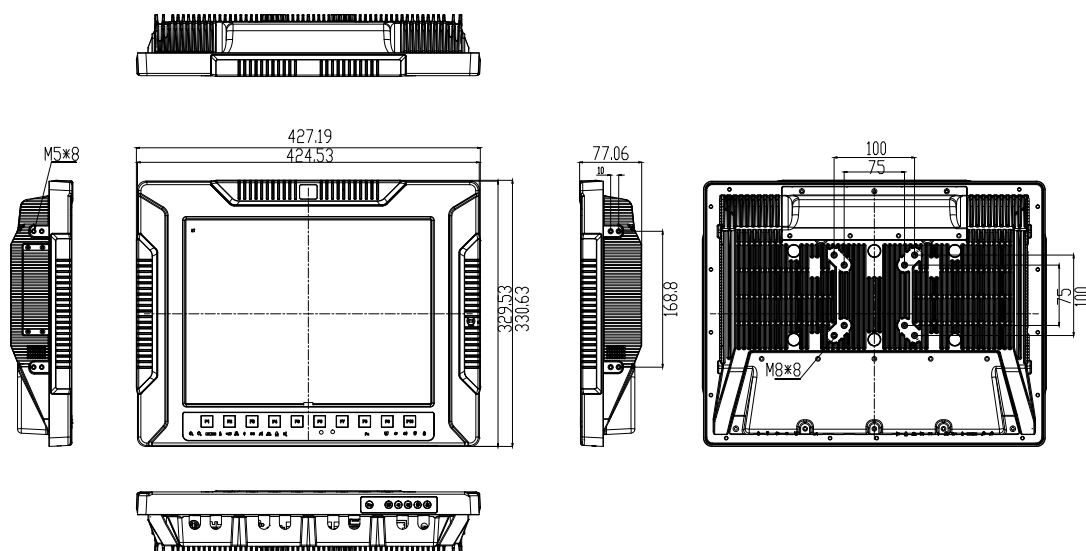
IO and Human Machine Interface



| | | |
|-------------------------|-------------|--|
| Fn | Fn | |
| Backlight On/Off | Fn + | RFID enable / disable |
| Audio - | Fn + | Audio mute |
| Audio + | Fn + | Camera enable / disable |
| Brightness - | Fn + | Right side USB enable / disable |
| Brightness + | Fn + | Power on / off |



Dimensions (Unit: mm)



UPC-V312-D525

12.1" Aluminum Rugged Panel PC



Features

- Fully IP 65 compliant with fanless Intel® Atom™ D525 1.8GHz dual-core processor
- 12.1" 600 nits 1024 x 768 LCD with LED backlight
- TWIN-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- Dual-band 2.4/5GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSPA+ USB module
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-megapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- Robust die-casting aluminum chassis



Specifications

| Model Name | | UPC-V312-D525-R12 |
|------------------------|---------------------------------|---|
| Display | LCD Size | 12.1" |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 600 |
| | Contrast Ratio | 700:1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.24(H) x 0.24(V) |
| | Viewing Angle (V/H) | 150° / 130° |
| | Backlight MTBF (hrs) | 50000 |
| Touch | Touch Screen | Resistive Type 5-Wire with RS-232 interface |
| | Touch Controller | DMC 9000 |
| Motherboard | SBC | UPCMB-V312-D525-R10 |
| | CPU | Intel® Atom™ D525 1.8GHz dual-core processor |
| | Chipset | Intel® ICH8M |
| | RAM | On-board 2GB DDR3 SO-DIMM (System Max. 2GB) |
| | Ethernet | Realtek RTL8111CP PCIe GbE controller |
| I/O Ports and Switches | Audio Codec | Realtek ALC888 audio codec |
| | | RS-422/485 (4-pin box header) |
| | | RS-232 (DB-9 connector) |
| | | CAN-bus (3-pin terminal block) |
| | | GbE LAN (RJ-45 connector) |
| | | 4 x USB connector |
| | | Audio jack (Line-out, Mic) |
| | | VGA port (DB-15 connector) |
| | | DC-IN 1 (terminal block) / DC-IN 2 (DC jack) |
| | | Reset button |
| | | AT/ATX switch |
| Connectivity | Wireless | IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telecom certified |
| | Bluetooth | Bluetooth V2.0+EDR with USB interface (optional) |
| | 3G | Reserved USB connector (Optional) |
| Driver Bay | SSD | CF Type II / mSATA (SATA2 Signal) |
| Physical | Front Panel Construction | Aluminum Die-Casting |
| | Chassis Construction | Extruded Aluminum Alloy |
| | Mounting | VESA 100mm x 100mm and 75mm x 75mm with M8 screws |
| | Front Panel Color | Orange (Pantone 151C) |
| | Dimensions (WxHxD) (mm) | 338.5 x 276.25 x 62.86 |
| | Cut Out Dimensions (WxH) (mm) | 338.5 x 276.25 |
| Expansion Slot | | 4.5 kg/ 6.8 kg |
| | | PCIe Mini slot for Wi-Fi |
| System Cooling | | PCIe Mini slot |
| | | Fanless |
| Environment | Operating Temperature | -20°C~60°C |
| | Storage Temperature | -40°C~85°C |
| | Vibration | MIL-STD-810F 514.5C-2 (with CF card or SSD) |
| | Shock | Half-sine wave shock 3G; 11ms; 3 shocks per axis |
| | IP Level | Full IP 65 |
| | Safety & EMC | CE / FCC |
| Power | Adapter | 65W power adapter (Meet PSE) (Power adapter supports operating temperature 0°C ~ 40°C) |
| | Requirement | Input: 90VAC~264VAC, 50/60Hz; Output: 19V DC Power 1: 9 (+/-0.3)~36V |
| | Consumption | Power 2: 10.5 (+/-0.3)~36V 52W |

Ordering Information

| Part No. | Description |
|------------------------|--|
| UPC-V312-D525/R/2G-R12 | 12.1" 600cd/m ² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz, 802.11a/b/g/n wireless module, resistive touch screen, 2-megapixel camera, microphone, 2GB DDR3 RAM, R12 |

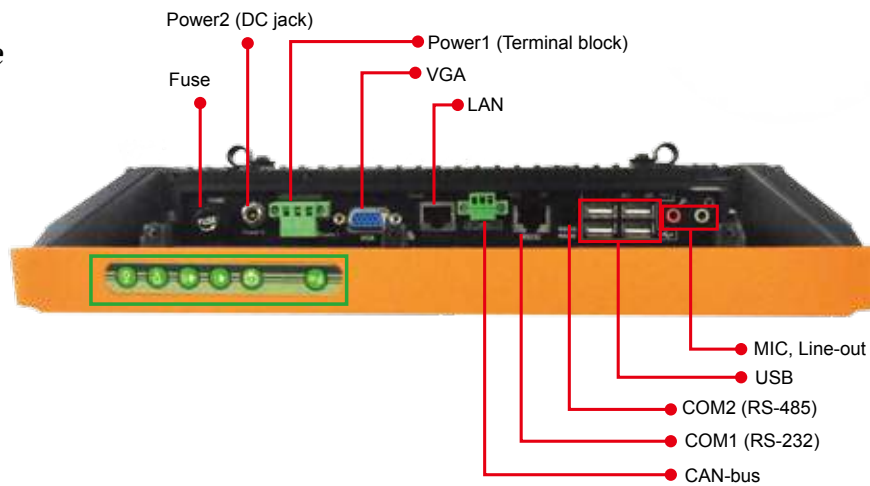
Options

| Item | P/N |
|----------------------------------|--|
| ARM | ARM-11-RS/ARM-31-RS |
| Wall Mounting Kit | AFLWK-19B/ AFLWK-12 |
| Stand | STAND-A19-RS/STAND-A21-R10/STAND-210-R11 |
| GPS Module Kit | UPC-GPS-KIT01-R10 |
| EM RFID Kit | UPC-EM-RFID-KIT01-R10 |
| MIFARE RFID Kit | UPC-MF-RFID-KIT01-R11 |
| OS: Win CE 6.0 (128MB CF Card) | UPCCF-V312-D525-CE060-128M-R10 |
| OS: Win XPE (4GB CF Card) | UPCCF-V312-D525-XPE-4G-R10 |
| OS: Win 7 Embedded (4GB CF Card) | UPCCF-V312-D525-WES7E-4G-R10 |

Packing List

| Item | P/N | Q'ty |
|--------------------------------|---------------------|------|
| Utility CD | 7B000-000741-RS | 1 |
| One Key Recovery CD | | 1 |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 |
| RJ-45 to DB-9 COM Port Cable | 32005-000200-200-RS | 1 |
| M8 Screw | 44325-080081-RS | 8 |
| M4 Screw | 44005-040082-RS | 8 |
| Mounting Bracket | 41003-0382C2-00-RS | 2 |
| Screw Driver | 45019-001004-00 | 1 |
| Power Adapter | 63040-010065-010-RS | 1 |
| Power Cord (European Standard) | 32702-000401-100-RS | 1 |
| RS-422 Cable | 32205-002400-100-RS | 1 |
| Power Transfer Cord | 32702-000300-100-RS | 1 |
| M8 to M4 Screw | 44300-040061-RS | 8 |

I/O Interface



UPC-V312 Dimensions (Unit: mm)

